## Chapter IV

# Strategic Planning for E-Learning in a Polytechnic

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## Abstract

*This chapter is a case study of how a polytechnic developed a strategic plan for e-learning. It describes the institution's rationale for moving more strongly into e-learning, the processes followed by the institution to develop a plan and ensure its acceptance through the institutional community, and the factors that facilitated the process. It indicates that attention to objectives, core values and principles, and faculty development and training, are critical for the successful transition from mainly face-to-face teaching to e-learning. The development of key performance indicators will allow the success of the plan to be measured in 2010.*

# Introduction

In many institutions, the introduction of e-learning follows a fairly standard pattern. Five distinct stages can be observed:

- **Stage 1 — "Lone Rangers" (Bates, 2000):** These are the early adopters. E-learning is introduced through the initiative of individual faculty members or instructors, often with no immediate or direct support from the institution.
- **Stage 2 — Encouragement:** The activities of the early adopters attract the attention of senior administrators, who try to support them with small grants or a slightly reduced teaching load.
- **Stage 3 — Chaos:** After a period of time, a growing number of instructors embrace e-learning, but the administration starts to get worried about quality, duplication of effort, lack of technical standards, such as the need to support different course development platforms, and above all, the costs of scaling up to large numbers of classes and instructors.
- **Stage 4 — Planning:** The senior administration realizes that priorities need to be set, common technical standards established, technical and design support and training for faculty or instructors developed, and cost-effective ways of developing e-learning established so that budget and instructor workload can be controlled.
- **Stage 5 — Sustainability:** The institution has established a stable system of e-learning that is cost effective and scalable. Few institutions to date have reached this stage.

This chapter is about the fourth stage, how one institution developed a comprehensive, formal strategic plan for e-learning. Stockley (2004) notes that there are many examples of how an institution should develop a strategic plan for integrating educational technology (e.g., Benjamin, Carroll, Jacobi, Krop, & Shires, 1993; Bruce, 1999; Dill, 1996; Ford, 1996) but few of how a strategic plan for e-learning has actually been developed and implemented in a particular institution. This chapter provides a case study of such a process. Although each institution is unique, this case incorporates planning processes and strategies that could be applied to a wide variety of postsecondary institutions.

# The Institution and Its Context

The Southern Alberta Institute of Technology (SAIT) Polytechnic is a public two-year, campus-based postsecondary technical institution focused on business, computer technology, health and safety, and trades and vocational training. It is located in Calgary, Alberta. In 2004, SAIT provided courses and programs to approximately 66,000 learners, of which just fewer than 12,000 were full-time, on-campus students. Its total annual budget is in the order of C$200 million.

SAIT first introduced e-learning in 1997 in the form of laptop programs. Laptop programs have been running continuously since. Four of the seven academic departments (Information and Communications Technology, Transportation, Business and Tourism, and Construction) had laptop programs in 2005, representing 26% of the institution's full-time learners.

However, not all programs in these departments required students to have a computer. Students in most other departments at SAIT were not required to use computers in their studies. More recently, a consortium of colleges lead by SAIT and supported by the province of Alberta established a province-wide portal for online learning, called eCampus Alberta, through which all existing online courses from each college could be accessed and taken for credit by any student registered at another college. However, SAIT's laptop programs were not fully online and could not be moved into eCampus Alberta. Lastly, one whole degree program (geographical information systems) was made available fully online. However, the total number of online courses was relatively small, at 42, with just over 1,000 course enrolments, or less than 100 full-time equivalent registrations.

The situation with regard to learning management software was also complex, with departments and programs using different systems. A committee established by the vice president academic recommended that SAIT standardize on WebCT, and the deans' council then requested that all program areas develop at least one fully online course. There was some resistance from instructors to this request.

SAIT's executive management committee's aim is to establish SAIT as Canada's premier polytechnic. They decided that e-learning was one strategy that would move them toward their overall vision for the Institute. SAIT set up an endowed chair in e-learning, partly funded by Cisco Systems Inc., and the chair on appointment was given responsibility for developing a strategic plan for e-learning.

Lastly, the political and economic situation in the province of Alberta was somewhat unusual. Alberta is an oil and gas producing province. The provincial government has eliminated all government debt, and in 2005 it had a budget surplus of almost $7 billion. At the same time, there were (and are) major skills

shortages in the province, and the government planned to increase access to advanced education throughout the province by adding another 60,000 seats in the postsecondary sector between 2005 and 2010.

## The Planning Process

Detailed work on a strategic plan for e-learning began in September 2004. The vice president academic set up a strategy development committee for e-learning to assist with the planning process. This 10 person committee, chaired by the chair in e-learning, aimed to represent all the key internal stakeholders likely to be affected by e-learning, while keeping the committee to a manageable size. The strategy development committee provided advice and approved the process and recommendations that were developed for the strategic plan.

Between September 2004 and January 2005, the Cisco chair in e-learning assessed the current status of SAIT's e-learning development, delivery, and evaluation strategy. To do this he met individually with all deans; observed laptop classes; held meetings with each academic department involving over 200 instructors; and met with over 60 students, the faculty association executive, and directors of support departments such as the library, IT services, and customer services. He also reviewed all relevant documentation such as the institution's academic and strategic plans.

In particular, the chair in e-learning worked with each of the academic departments to help them develop a concrete vision of how they would like to be teaching in five years time and where e-learning would fit within that vision. These departmental meetings with instructors were crucial for identifying issues that needed to be addressed in the plan.

The full plan contained 82 recommendations, including a strategy for implementation, under the responsibility of a newly appointed associate vice president, academic development. The plan was approved in principle, subject to affordability, by the deans' council and the executive management committee and went to the board for approval in principle in January 2006.

# Preparatory Steps in Developing the Plan

Before the plan was developed, five critical steps were taken, all in parallel.

## Definition of E-Learning

In 2004, there were at least eight different terms being used to describe teaching with computers at SAIT. Sometimes different terms were used to describe the same activity in different departments; other times the same term was used to describe quite different activities.

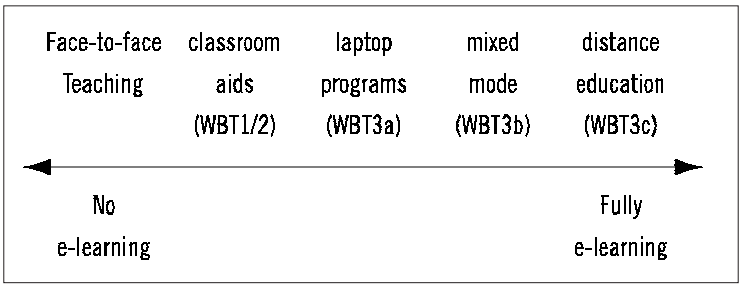
The chair in e-learning started with the OECD definitions of e-learning (OECD, 2005):

- None or trivial online presence.
- Web supplemented.
- Web dependent, but without significant reduction in classroom time
- Mixed mode—students' online activities *replace* part of face-to-face teaching/learning, but significant campus attendance remains
- Fully online

Interestingly, the OECD classification did not include laptop programs. To complicate matters, SAIT's Centre for Instructional Technology and Development had a five-category taxonomy related to different types of use of WebCT. These can be summarized as follows:

- **WBT1:** Static administrative site
- **WBT2:** Student tests
- **WBT3A:** Laptop programs and supplementary "static" course resources and testing
- **WBT3B:** Essential use of WebCT—course resources and discussion forums
- **WBT3C:** Virtual course—all materials online (these would include all eCampus Alberta courses)

*Figure 1. Revised OECD definition of e-learning*




Thus the OECD definition was broadened as shown in Figure 1.

Conceptually, then, e-learning was considered as a continuum, reflecting increased flexibility for learners, from no e-learning to fully online e-learning. This led to the following definition of e-learning at SAIT, which was agreed to by EMC:

*all those computer and Internet-based activities that directly or indirectly support teaching and learning at SAIT, both on campus and at a distance*

This broad definition recognizes the dependency of e-learning on other computer-based services, such as information systems, customer services, and the library.

## Situational Analysis

The situational analysis looked at strengths/opportunities and weaknesses/threats (a modified SWOT analysis) under the following headings: planning, students, employers, programs, instructors, support services. (Funding is a heading that could have been added, but it was not seen to be an issue at this stage, given that there was an expectation that additional resources would be needed and available.)

The situational analysis identified that there was strong support for e-learning from some employers, from most deans and directors, and from many students. Instructors were more cautious. Although few objected to e-learning in principle, many wanted to be sure that resources and time would be made available to enable good quality e-learning to be developed. A minority believed that for their

subject area, e-learning had limited potential. Although the laptop programs were generally judged to be successful by employers, students, and faculty, laptop programs required regular class attendance and therefore did not provide the flexibility of other forms of e-learning. In particular, laptop programs did not provide the flexible access needed by learners in the workforce. Therefore, despite the success of the laptop program, good technology infrastructure, and skilled staff to support e-learning, SAIT was judged to be several years behind the lead institutions in the polytechnic sector with respect to e-learning.

## Rationale for E-Learning

The mandate to develop a plan for e-learning came from the executive management committee, but no formal rationale for e-learning had been codified. A detailed rationale for the use of e-learning was developed by the chair; discussed, modified, and approved by the strategy development committee for e-learning; and signed off by EMC.

The following reasons for moving more strongly into e-learning were identified:

- To meet the flexible needs of today's students
- To increase access to SAIT's programming
- To enhance teaching and learning
- To better prepare students for the requirements of business and industry
- To develop independent learning skills through exposure to online programming
- To better accommodate the differing learning styles of SAIT's students

The plan was to provide a means by which SAIT could meet increased market demand, particularly for workplace training, and increase overall student numbers, without the full cost of additional physical facilities. In particular, the plan should enable SAIT to produce graduates with the vocational and trade skills needed in an information-based economy.

## Core Values and Principles

Discussion with instructors at the academic department meetings indicated the need for a set of core values and principles for the development of e-learning if any plan was to receive their support. There was understandable concern, for

instance, that e-learning would increase instructors' workloads, that it would be used to replace instructors, or that it would be imposed from the top with a one-size-fits-all approach.

The following are examples of the 15 core values and principles taken to EMC and agreed to:

- E-learning will be used only where there are clearly identified benefits (educational, financial, strategic positioning, etc.).
- Decisions about appropriate use of e-learning is an academic decision to be made at departmental level, but based on knowledge and understanding of the strengths and limitations of e-learning.
- E-learning is not being used to replace instructors but to strengthen their role in teaching and learning.
- Increase in workload for instructors and students is to be avoided by following best practices in e-learning, which includes team work, quality assurance processes, new approaches to teaching and learning, organizational change, and project management.
- Instructors will have adequate time and resources for training in the use of e-learning.
- E-learning materials and programs will be developed in a cost-effective manner, although costs will vary depending on the market and the requirements of the subject matter.

The agreement to these core values and principles was a very important part of the planning process. They enabled points of conflict that had been identified to be addressed before detailed planning began. They provided a context and framework to guide decision making and recommendations and a means of evaluating proposals in the plan. More importantly, they enabled trust to be built with all the key stakeholders.

## Vision for E-Learning

A vision statement for e-learning was developed after extensive consultation within the institution and was approved by the EMC.

At the *institutional* level: SAIT will be an international leader in e-learning development and delivery in the post-secondary sector, with a special emphasis on the appropriate and cost-effective use of e-learning for the development of

workforce skills in a variety of trades and professions; all SAIT students will graduate with the information technology skills required in their area of specialty.

At the *academic department* level: Each program in each academic department will develop, for approval by the Dean and VP Academic, a vision for teaching and learning, and within this broader vision for teaching and learning, a vision or plan for the role of e-learning within each program. The vision will be reviewed and amended at least every three years.

At the *administrative* level: Students will be able to access all student services through the Web. All departmental information will be Web-based and accessible to the public, as far as privacy and security allow.

Once these preparatory steps were completed, the development of the plan became greatly facilitated.

# Academic Issues

## The Design of Teaching

E-learning should not be approached as a *technical* solution but as a *learning/business* solution. It is more likely to be successfully implemented if it is seen as part of a broader strategy of institutional renewal and innovation (Bloom, 2004). Although traditional methods of teaching can be transferred to teaching by computer (as in laptop programs), and e-learning can supplement regular face-to-face teaching, the unique strength of e-learning is the flexibility and control it can provide to learners, built around the ability of instructors and students to access the learning materials and processes at any time and any place. However, for flexible learning, designs for teaching are required that are entirely different from the classroom model. E-learning not only requires decisions about the place and time of delivery of programs, but also the type of teaching and learning that should be adopted. Instructors above all need to understand fully the different options available to them and to keep abreast of the changing needs of employers.

Thus e-learning requires a rethinking of the curriculum and how best it can be taught. The plan therefore recommended that *the move to e-learning should be combined with the adoption of new methods of teaching and learning that reflect the needs of a workforce in an information-based society*. This was probably the most important strategic decision that SAIT had to make with regard to e-learning.

## Planning for E-Learning in Academic Departments

Apart from laptop programs, most departments had no overall plan for e-learning. E-learning is a tool; therefore, planning for e-learning needs to be integrated within an academic department's overall strategy for teaching and learning. The plan recommended that each department should annually produce a three-year plan for teaching and learning that specifies not only what courses and programs it wishes to offer, but how these programs will be taught and the numbers and types of students it is targeting. This plan would include proposals for e-learning. It would be linked to the budget process and would be the main factor determining allocation of resources to the department for the next fiscal year.

The plan set a target for the development of 450 new courses over five years in either a mixed-mode or fully online format, or roughly 10-15 new courses a year in each department. Laptop programs would continue, but would be modified over time to provide more flexible access. Mixed-mode or fully online programs were to be supported by business plans that identified the rationale for e-learning; the intended market; learning objectives (skills and content); the method of teaching; the costs of developing, delivering and maintaining the course or program; and the likely amount and type of revenue to be generated by the planned course or program. E-learning projects would be developed through a project team involving faculty, instructional designers, Web programmers, and other appropriate support staff.

Academic departments should have a plan to move students from being dependent to independent learners through a gradual increase in e-learning and the deliberate use of teaching strategies to develop independent learning skills. The knowledge of how and when to replace hands-on activity with virtual learning through simulations and other techniques should be seen as a core area of expertise for SAIT. Corporate Training would have a key role to play in developing or brokering e-learning for workforce training and therefore should develop a strategic plan for its activities in e-learning.

Thus, academic departments would have a good degree of autonomy within general directions set by the vice-president academic to determine priorities for e-learning, and e-learning planning would be embedded within overall academic planning within the academic division.

## Faculty Development and Other Human Resource Issues

The meetings with academic departments revealed that few of the instructors were adequately prepared to develop quality e-learning. Most instructors came

to SAIT with a trades or industry background and, while they are generally very computer literate, they lacked the understanding of educational theory needed to fully exploit e-learning.

E-learning requires substantial up-front planning and development of materials before a course or program is ready for delivery. Extra time would be needed initially to create a large core of e-learning courses. Ongoing training and professional development would need to become an essential and regular part of the work of all instructors. However, instructors at SAIT had a very heavy classroom teaching load (over 20 hours a week in front of a class, on average). Therefore, teaching loads would need to be reduced over several years to free up the necessary time for course development and faculty training. Eventually, a reduction of time spent in class while students are online, a higher proportion of students working independently online, and an increase in support staff should free up at least some of the time needed by instructors for the development of online materials. However, it was recognized that initially e-learning could not become a major part of SAIT's strategy without increasing the number of instructors to reduce current teaching loads. Therefore, it was recommended that a total of 30 additional full-time instructors be hired initially to kick-start mixed-mode and fully online e-learning across the institution.

Furthermore, most professional development was being done in face-to-face small group workshops after the two regular semesters were completed in April. More flexible ways of delivering training and professional development for faculty needed to be explored, such as online courses on how to design e-learning courses and short periods free of teaching during the regular semesters. It was therefore recommended that the Centre for Instructional Technology and Development run Institute-wide workshops where generic needs dealing specifically with the overall design of e-learning could be identified. It was also recommended that each instructor have a training plan in place by June 30, 2006, and that a senior instructor within each department be appointed to organize the department's in-house faculty development program, in collaboration with CITD. Lastly, SAIT needed to examine and upgrade its current personnel policies for e-learning support staff to ensure that terms and conditions of employment were competitive, because SAIT was finding it increasingly difficult to recruit and retain such specialist staff.

## Student Computing Policies

The vision statement required all SAIT students to graduate with the information technology skills required in their area of specialty. In discussion with instructors from every department, it was clear that in each program there were topics that would benefit from knowledge in how to use computers and/or the Internet,

although the overall importance varied from course to course. Thus, in the near future every student would need computer access at some time in their program. However, programs requiring students to use a computer must have clearly specified added value in terms of the competencies that students would develop through the use of the computer. Every program, therefore, should have a clear policy statement about the need for a computer, the benefits it would provide, how the computer should be supplied, the minimum technical specifications, and the computer skills needed by the student on entry to the program.

It was recommended that programs requiring full attendance on campus continue to operate current laptop policies, where SAIT owned the computers and the cost was included in the student tuition fee. Students would be expected to provide their own computers for fully distance and mixed-mode courses and for campus-based courses where the use of a computer was optional. SAIT should provide a pre-entry course to bring all students up to the minimum computer literacy standards set by SAIT.

# E-Learning Support Issues

## The Centre for Instructional Technology and Development (CITD)

To ensure the quality of SAIT's e-learning, the plan strongly recommended a team approach to the design and development of e-learning programs, requiring input not only from subject experts (the instructors), but also from instructional designers, Web programmers, and media producers. The Centre for Instructional Technology and Development (CITD) was expected to provide this essential support.

However, as in many institutions, there was an ongoing tension between the academic departments and the central support unit. CITD could not meet all the demands on its services. It was able to provide service to only 22 out of 80 projects in 2004. Furthermore, although CITD had instructional designers and faculty development specialists, some were not trained or experienced in e-learning or project management. Consequently, a number of academic departments had been building a cottage industry in distance education and instructional design based on short-term contracts. However, since it is difficult to find high quality specialists in e-learning, it made sense to provide regular employment, both to recruit good staff and to ensure that experience gained in e-learning remained within the organization. Thus to achieve high standards in e-learning,

it was important for e-learning specialists to be funded and staffed with full-time positions, with the ability to move them around the organization as demand among different departments fluctuated.

As a result, it was recommended that CITD increase capacity from 4 to 20 instructional designers, from 11 to 20 multimedia developers, and from two to four faculty development facilitators, over the next five years. At the same time, a matrix model of management of CITD resources was recommended. A committee each year would determine the allocation of CITD resources to different departments through service agreements, but it was strongly recommended that specialist e-learning support staff continue to be funded through and responsible to the director of CITD.

## Other Support Departments

The plan also discussed the support requirements in the library, information systems, and customer services. A modest increase in resources was recommended for the Library to strengthen its support for online learners. The IT infrastructure at SAIT was in general of a high level, but there were some weak spots. Some teaching areas had wireless access, but many did not. It was recommended that the whole campus have wireless access by September 2006. An extra technician was needed to provide 24x7 support for WebCT, and additional servers and data centers were required. The main platform would continue to be WebCT, and the strategy development committee would be responsible for recommendations regarding upgrades and developments.

Customer services is a term used at SAIT to cover a range of administrative services to students, including the registrar's office. The more students move to e-learning, the more demand there will be from both instructors and students for online access to administrative services. SAIT had a made a good start by building two portals, mySAIT.ca and myFaculty, through which a number of services could be accessed online. However, new functionality needed to be added. It was recommended that a mySAIT.ca management committee be established, chaired by the Registrar, to determine priorities and to identify and access resources for the up-grading and maintenance of mySAIT.ca. More importantly, SAIT needed a broader, integrated institutional e-strategy that would encompass all uses of the Internet, including e-learning, e-commerce, and e-administration.

# Organizational Issues

## Intellectual Property and Academic Content Management

E-learning results in the creation of digital content that can be re-used or re-designed for multiple uses. Digital content therefore has potential value that goes beyond its initial use in a specific act of teaching or learning. As Magee (2005) comments, "the considerable investment in [digital] materials requires an organization to receive fair compensation for their use and maintain control over their usage." Despite a great deal of research and development into specific learning objects and standards, little attention has been paid to the issue of the management of digital content from the strategic perspective of an institution.

Some of the strategic issues in academic digital content management are as follows:

- How best to create digital content so it can be re-used.
- How to store and make accessible digital content.
- Who owns the copyright for digital content once created.
- What uses are permitted of that content and who decides.
- Quality control or assurance.
- The business case for digital content management.

It was recommended that SAIT management make a clear statement about its financial goals with respect to the re-use of digital learning materials and online courses, as there are various positions that could be taken, from a free public resource through to charging for everything. It was also recommended that a sub-committee on the management of digital content be established. Its mandate would be to develop a plan for content management, including recommendations on policy and procedures. To assist in developing policies for content management, the business case for the re-use and sale of learning materials should be explored by corporate training. In the meantime, SAIT should establish initially a low-cost central registry of all digital e-learning materials that would enable materials to be quickly and easily identified for third-party use.

Although many IP issues concerning the creation and use of digital materials were covered by current IP policy (which specified that all materials created by employees belonged to SAIT), it was recommended that SAIT develop a generic wording of contracts with third parties to protect moral rights and the integrity

of SAIT's digital materials when re-used. Better procedures to ensure both copyright compliance and easier use of copyright materials were needed.

## Financial Issues

In the long run, the aim of the plan was to develop a system where e-learning courses and programs could be designed in such a way that there would be no net increase in work for instructors. However, for e-learning to be cost-effective, instructors would need to be skilled and experienced in the design of e-learning and have adequate technical and educational support. Given that this was not the case at the time of the planning, it was recognized that over the first five years following the initial implementation of the plan, substantial investment would be needed to support the design and development of e-learning programs. These costs would be largely offset by additional revenues through increased enrolments of approximately 25%, if the target for new e-learning courses was met. Brokering of online materials and services and contracts with the corporate sector would also generate substantial revenues.

After five years, the costs of e-learning would be an integrated part of the overall academic budget. The main risk would be hiring 30 new instructors to help generate new e-learning programs and to improve the general teaching skills level. However, this risk was offset by the knowledge that student numbers would likely increase and government funding was likely to be available to support such an increase.

## Implementation and Monitoring

The new associate vice president of academic development was given the mandate to ensure the plan was implemented. The plan also gave considerable attention to how success in e-learning could be monitored and evaluated. A careful examination of existing evaluation tools and methodologies at SAIT indicated that these on their own were insufficient to assess the success or otherwise of e-learning. Thus the following specific key performance indicators were recommended to monitor and evaluate SAIT's e-learning strategies and activities on an annual basis, using 2005 as the base:

1. Target number of courses using each type of e-learning
2. Target five-year budget projections for e-learning

3. Cost per enrolled student
4. Implementation of quality assurance procedures
5. Student satisfaction
6. Employer satisfaction
7. Analysis of student enrolments by type of student
8. Course completions
9. Changes in learning outcomes/student performance
10. More effective use of facilities
11. Cost per graduate student
12. Increased revenues or savings due to the introduction of e-learning

SAIT should use its KPIs for e-learning to benchmark its progress against similar institutions, or institutions which SAIT considered to be international leaders in e-learning.

# Factors Influencing the Development and Acceptance of the Plan

Strategic planning is a continuous narrative. Although the plan was approved by the EMC in September 2005, it still had to be implemented at the time of writing (December 2005). However, a detailed plan has been approved, and it is possible to review the factors that enabled such a plan to be created.

## Institutional Leadership

The plan was driven primarily by the vice-president, with the full support of the president and her executive team.

## The Cisco Chair in e-Learning

The endowment of a chair enabled the VP to hire a specialist in e-learning under flexible conditions of employment to take leadership in developing a plan for e-learning. The chair spent a total of 70 working days over a period of 12 months on developing the plan. There was an advantage in having someone from outside

the institute with recognized expertise who could take an independent view on the process of planning, but with a long enough appointment to provide significant input, continuity, and accountability.

## Inclusiveness

The process aimed to be as inclusive as possible. Despite limited availability of instructors due to their heavy teaching load, the chair in e-learning met with over 200 instructors and spent several hours in each academic department discussing e-learning, the problems and barriers, and its potential role with instructors and curriculum coordinators. The visioning process, in which departments discussed the future role of e-learning, was both a failure and a success. It was a failure in that few departments were able in the time available to identify innovative or even appropriate roles for e-learning. Nevertheless, it was a valuable exercise in that it indicated the scale of the problem of faculty readiness, the need for more professional development and training in teaching methods, and the difficulties departments faced in finding time for instructors to do anything other than stand in front of a class during the two regular teaching semesters. Students also played an active and important role in the planning process. Students, in fact, were impressively thoughtful and engaged in the process.

There was one important stakeholder group that was not involved at this stage and perhaps should have been. SAIT has close links with employers, and there was a feeling by some instructors and one or two deans that employers or accrediting agencies such as Transport Canada would not understand or support a move to e-learning, especially if it resulted in less time hands-on in skills training. Employers certainly need to be consulted as individual e-learning programs are being planned, and employers would be closely consulted at this stage. However, the college made a decision in principle to increase its e-learning activities, partly as a result of input from some key employers before the plan was developed. Nevertheless, the timing in terms of involving employers in discussions on proposed changes to a public educational institution's teaching strategy is an important consideration.

## Political Context

The senior administration was aware of the government's large budget surplus, their intention to dramatically increase enrolments in the post-secondary sector, and their interest in technology investment to improve performance in the colleges and universities. SAIT's senior administration therefore saw increased investment in e-learning as a means by which to meet core government goals for

the postsecondary sector in Alberta. Its plan for e-learning would position the institute for the forthcoming government review of postsecondary education, due in December 2005. Thus, the plan for e-learning was aligned as a core element of SAIT's overall strategy.

## Conclusion

SAIT's strategy is not to eliminate face-to-face teaching, nor to use e-learning merely as a supplement to classroom teaching. There is no single solution for teaching, and each academic program has to decide the best mix of face-to-face and online teaching, depending on the intended target groups, the nature of the content, and the resources and skills available. At the end of five years, then, the plan envisages that three quarters of all programs would still be largely face-to-face classes. About 50% of all classes would not require computer access or would use e-learning as an optional supplement to classroom teaching. Another 25% of all classes would be laptop programs, requiring regular class attendance. The main change would be to move approximately 15% of all classes into a mixed-mode format, accommodating students who require more flexible access but who do not want to lose face-to-face contact with instructors and other students. The remaining 10% of programs would be fully online aimed at lifelong learners. In addition, there would be a separate but important program linked to corporate training, through re-sale or brokering of online training materials and contracts for the development and/or delivery of corporate specific e-learning programs.

However, it would be a mistake to consider this a modest change in teaching practice. More important than the actual mix of different kinds of e-learning is the shift in teaching methodology, away from an instructor-led classroom model to one where students work more independently and where instructors create learning materials and facilitate and manage learning activities, working with an instructional designer and Web developer in a team. Also, the plan envisages a significant change in the student population. While the high-school leaver wanting full-time, campus-based education will still constitute a majority of students, the plan foresees substantial increases in part-time students and lifelong learners, and a much stronger corporate training market.

Before the Normandy landings, General Eisenhower said "Planning is everything; the plan is nothing." In other words, the process of planning is what provides readiness and flexibility, even if plans have to be changed or abandoned in the light of unpredicted events. Although the plan calls for a change in culture, it follows well substantiated change management processes from the business sector, but adapted to the postsecondary sector (see Bates, 2000).

The real test though still lies in the future. Will the administration be able to support and implement the processes outlined in the plan? Will the key stakeholders—students, instructors, employers—buy into the plan? Will the institution be able to find the financial resources needed to make e-learning a success? And above all, will instructors be able and ready to change their methods of teaching? We will have to wait until 2010 at the earliest for the answers to these questions.

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