

VOLUME 4
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Greg Whateley and Ian Bofinger





'Virtually Yours'

THE CREATION OF AUSTRALIA'S FIRST VIRTUAL CONSERVATORIUM (2000 TO 2003)

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Greg Whateley
Ian Bofinger

Melbourne, Australia

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Foreword

The story of *Virtually Yours* is more than an historical record - it is a blueprint for the future of education. At the turn of the millennium, when most institutions were still tentatively experimenting with online delivery, the Central Queensland Conservatorium of Music undertook something far bolder: it set out to create a *Virtual Conservatorium*. This initiative was not merely about survival in a geographically remote region with limited local enrolments; it was about reimagining what an institution could be in the digital age.

The project was visionary in its scope. It anticipated global trends toward speed, connectivity, and the intangible economy of knowledge long before these became everyday realities in higher education. By committing to the principle of "anywhere, anytime, anyhow," the Conservatorium positioned itself as a pioneer in rethinking access, equity, and sustainability. What emerged was not just a music school with an online presence, but a model for a distributed, entrepreneurial, and technologically integrated institution.

This book can also be read as an *instruction manual* for establishing a virtual institution. It does not romanticize the process; instead, it details the practicalities - the challenges of staff retraining, the restructuring of programs, the integration of technology, and the necessity of cultural change within a traditional academic environment. It demonstrates that innovation requires both vision and discipline: vision to imagine what does

not yet exist, and discipline to build systems, resources, and governance structures that can support it.

The lessons here extend beyond conservatoria or music education. They speak to any institution grappling with questions of relevance, financial sustainability, and student access in a rapidly changing world. The authors show how entrepreneurial thinking, when allied to academic integrity and creative pedagogy, can transform vulnerability into opportunity. The Virtual Conservatorium was not conceived as a stopgap but as a paradigm shift—one that would influence practice across the sector for decades.

Two decades on, the ideas still resonate. As universities worldwide confront renewed pressures of global competition, technological disruption, and student demand for flexibility, the roadmap laid out in these pages remains strikingly relevant. *Virtually Yours* reminds us that to survive and thrive, institutions must not only adapt but also dare to reinvent themselves. This is both a case study in visionary leadership and a guidebook for those ready to embark on their own journey toward building the virtual institutions of tomorrow.

Dr Tom O'Connor Melbourne

Preface

The problem for this project was the solution to the question, 'How can a conservatorium in a geographically isolated area with a relatively small catchment area survive and thrive in the 2000's?' This book chronicles the story of a three-year strategic plan that took on this challenge – and has resonated across the Sector ever since.

It was appropriate to discuss global conditions that were the driving forces of economies and the education systems within them. In addition, we attempted to show how these 'macro-conditions' affected the Australian University system and especially conservatoria.

Having contextualized the project, we then explored the main facilitating conditions that provided an opportunity to diversify the *Central Queensland Conservatorium of Music* in ways that better fitted the international and national pressures that beset university- based conservatoria.

The Virtual Conservatorium, we then argued, provided a workable alternative to current conservatorium practice and at the same time provided a cost effective, contemporary, technology friendly paradigm that ensures ongoing quality and delivery effectiveness.

Influenced by writers and theorists at the time – we pushed on with the initiative. Looking back – some twenty years - the project still remains exciting and informative.

Greg Whateley Ian Bofinger

WHAT PROMPTED THE INITIATIVE

The Central Queensland Conservatorium of Music was not unique in the fact that it had faced serious threats to its future existence. The larger university body, Central Queensland University, employed an external consultant to assess the viability and anticipated ability to operate within an acceptable financial framework. The question was then raised - 'How can a conservatorium in a geographically isolated area with a relatively small catchment area survive and thrive in the 2000's and beyond?'

Before proceeding to the details of *The Virtual Conservato-rium*', the answer to the question, we needed first to place the conservatorium into an international and national context. In order to do this, it was appropriate to discuss global conditions that were the driving forces of economies and the education systems within them. These 'macro- conditions' affected the Australian University system and in turn affected the focus of this project - *conservatoria*.

This book documents the rationale and the product creation which gave the *Central Queensland Conservatorium of Music* the opportunity to diversify in ways that better fitted the

international and national pressures that beset university-based conservatoria at the time – and for that matter currently.

Speed, Connectivity and Intangibles

Davis and Meyer (1998) provided inspiration for a new way of doing things with an emphasis on speed, connectivity and intangibles. Speed is the shrinking of time through near-instantaneous communication and computation; Connectivity is the shrinkage of space with the advent of the Web, e-mail, beepers, SMS, and other media of communication; and Intangibles are values without mass, most importantly knowledge and its mobility, made possible through speed and connectivity.

In examining the 'Blur' economy three parts emerged "the blur of desire, the blur of fulfilment, and the blur of resources." (Davis and Meyer, 1998: 14) In the 'old economy' model businesses sold either products or services. In the 'new economy' the blur was to do with the fact that businesses now sell both 'product and service' - often so enmeshed or intermingled that the distinction become very difficult.

This issue resonated when considering the changes needed to develop a new conservatorium in this new economy. Amongst the fifty ideas listed in Davis and Meyer (1998) to 'blur' businesses in the new economy, three emerged as fundamental to the *Central Queensland Conservatorium of Music* challenge. They were virtual location; connect everything to everything; and connect to anything at any time. These three notions featured strongly in our initiative.

There was every chance that employers would require a degree as a minimum prerequisite of employment. However, taking time out for a degree was (and remains) expensive and diminishes the opportunity for valuable on the job experience. The answer to this conundrum was an Online degree that allowed you to earn, learn and work - all at the same time.'

Conservatoria Conditions at the time

The financial position of Australian Conservatoria was reportedly one of difficulty. Burt (1999) discussed this trend, ... it seems to be typical of many academic institutions in Australia at that moment. The closure of LaTrobe Music, the downgrading of computer music teaching positions in more than one institution to subjects taught by graduate students or even technicians...' Academic programs were being taught in a similar fashion and a similar content to those taught twenty years prior although federal funding levels had not changed for at least 12 years leading up to the time of our interest. For Conservatoria to gain financial viability they needed to address the content and cost of delivery of offerings.

The Music Department of the University of Sydney had a very public airing of its problems at the time. An Australian film released in July 2001, *Facing the Music*, told the story of Professor Anne Boyd's fight to maintain academic standards while, as Boyd maintains, 'the economic-rationalist university hierarchy cries poor and starves arts of funding'. Howitt (2001) describes the scenario:

'For years Professor Anne Boyd has been teaching three to four times the recommended maximum academic teaching load in order that music students in her department (she holds the Chair) not suffer. For years the Faculty of Arts has been prepared to admit far more music students than could reasonably be taught properly by the available staff.'

In March 2002, an anonymous benefactor donated almost one million dollars over five years to the University of Sydney's music department. As Episale (2002) reported 'the donation was part of a negotiated agreement in which the university would match the contribution dollar for dollar. This agreement rescued the department from almost certain decline and demise.'

An issue of critical mass was then apparent for sustained financial viability. Private enterprise business 'startups' considered any program with staffing costs above 60% to be nonviable, yet many conservatoria seemed to operate with staffing costs at 90%- 100% of the gross income. By increasing the variety of conservatoria offerings and the overall mass, in terms of student numbers, the percentile weighting of the operating costs was more easily absorbed with the larger critical mass.

Universities of this new millennium were concerned with the mind-set, mechanisms and practices that are necessary to re-invent and re-engineer themselves to become surplus making organisations. Central Queensland University was no exception. Given the context of the economic pressures at the time, these surplus making exercises were fundamental to future growth, quality provision and student/staff morale. It was necessary to explore important matters such as changing the mind-set from a 'scarcity' to 'abundance' mentality; and encourage new venture units ('skunk works') whose role was to explore beyond the perceived boundaries of the organisation; change management style at all levels to facilitate entrepreneurial activities; effectively use outsourcing for teaching and administrative purposes; develop strategic alliances and networks; and develop the notion of thinking globally even though working locally; all these needed to be explored.

To operate within the above parameters required a change in thinking and approach. There was a need for a 'new approach'—a 'new organisation'. Limerick et al (1998) spoke of a new form of organisation that was required—

'A new form of organisation is set to take us into the twenty-first century. It will have strategies, structures and cultures which are quite different from those with which we have been experimenting with for the past decade - and which are dramatically different from those that served us so well during the previous 20 years or more. It will offer new opportunities as well as new problems for management, and it will demand new mindsets, skills and competencies from those within it.' (p. 1)

This was hardly an easy task with academic elements often opposed to, or at least uncomfortable with 'entrepreneurship' and with university bureaucrats experientially far removed from contemporary business practices. In the short term, it was necessary to empower university elements to develop entrepreneurial activities. Concurrently, the larger organisation needed to reinvent itself attitudinally to deal with flexibility, a broader range of initiatives, a focus on significant add-on value to its conventional operations and a mechanism for dealing with 'profit' from its initiatives.

A crucial part of this process was the need to re-engineer current operational principles and mind-sets. The development and proliferation of new fee-paying courses (despite the fact that they appeared to be fresh initiatives) would achieve very little if those courses end up competing with already existing markets. The 'power' lay in developing new initiatives that bring in new monies — our analogy was 'fishing in new ponds'.

There had been a number of reviews and investigations of music training in recent years, and recommendations to merge and amalgamate conservatoria and music departments in Australia. In Adelaide and Brisbane the debate had run for nearly a decade. That was a direct result of the competitive marketplace including the domestic private providers and international universities. There was a perceived overlap between these providers which means future viability would be the result of creative practices rather than duplication.

A merger between The Elder Conservatorium and the Flinders Street School of Music had been proposed on several occasions. The minutes from The University of Adelaide Academic Board 15 March 2000 state that 'The fact that previous recommendations for merger and/or co-location had produced no practical outcome left the original issues unresolved while creating a climate of uncertainty about the future.'

In Queensland similar debate had been entered into regarding the proposal to attach the Queensland Conservatorium to the University of Queensland. The University of Queensland had a Music Faculty which has been experiencing financial difficulty.

The Queensland Conservatorium had a high-performance profile but again was running as a separate administrative entity within Griffith University had caused further financial deficiencies. The proposal - at the time - was to for locate the Queensland Conservatorium within Griffith University's Arts faculty structure.

The focus on student access — Anywhere, anytime, anyhow — was one of the foundation theories on which The Virtual Conservatorium was based. The buzzword "24/7" was commonly used in business marketing and operations but had never before been used in conjunction with a conservatorium of music. To achieve "24/7", a reinvention of the product delivery was essential for future feasibility. Many universities used this concept of online delivery as a marketing tool, but on closer inspection, this was simply the use of online notes and email. The University of the Sunshine Coast boasted that 'USC's Online MBA gives students two options in how they can choose to study. The first is to work online. The second was the flexibility to download a PDF file of the whole course content so that you can print it out and take it with you for those odd study moments you have while travelling etc'. The concept of virtual delivery proposed to eclipse these simple methodologies to truly gain access to students anywhere, anytime, anyhow with technologies such as bluetooth mobile communications, software training packages, specifically designed CD-Rom, DVD, VCD as well as more traditional online methodologies. Associated with the creation of such diverse resources were potentially available efficiencies in utilization for both the virtual and on-campus student body.

A matter of location

In 1988, Griffith University initiated a feasibility study to set up a regional campus of the Queensland Conservatorium Music. A shortlist of four possible centres was proposed and included Cairns, Townsville, Mackay and Rockhampton. After much community consultation Mackay was chosen as the regional centre most suitable for such an artistic endeavour.

The Campus quickly outgrew its status as a feeder for the Brisbane based Queensland Conservatorium Griffith University and evolved into a 'stand-alone' entity known as *Central Queensland Conservatorium of Music*, Central Queensland University. The student population also grew from 23 to 90 and the initial geographic catchment area of Central Queensland grew to include the whole of Australia and beyond. With this came the difficulty of survival associated with being located in the most northern campus of the university, almost 1000 kilometres north of Brisbane, 2250 kilometres north of Sydney and 3000 kilometres from Melbourne.

When the statistics for audition applications for the Mackay location students were reviewed, the greatest numbers were from the South-East Queensland district, whilst the smallest percentages were from the North and Central Queensland regions. For the Conservatorium to survive and thrive through the next ten years and beyond it was essential that the organisation continue to attract students from all over Australia. This would require ongoing commitment, resources and focus.

Wider University Support of Business Activity and National Contexts

The University's 'Statement of Strategic Intent 2001 — 2005 made it clear that flexible delivery and multiple site operation was appropriate and - encouraged. One such key statement read - 'Produce learning resource materials of the highest quality and integrate the course offerings for distance and on-campus students through flexible learning strategies.'

The conditions were right for an initiative such as an off-campus, online conservatorium. Encouragement of entrepreneurial activities (such as profit raising activities; multi-site operations; cross arts platform designs; and the like) by Central Queensland University senior management and internally by the Director of CQCM lead to the concept and initial delivery trials of 'The Virtual Conservatorium'. The pressure for change within Central Queensland Conservatorium of Music

The pressure for change within Central Queensland Conservatorium of Music

Given the nature of the operating environment, change was inevitable and mandatory from the outset of the appointment of the new Director at the commencement of 2000. The Dean of the Faculty of Education and Creative Arts and the Vice Chancellor also supported this need for change. By the end of 1999, the Conservatorium had accumulated a \$1m deficit with little hope of recovery given an annual gross income of just \$1.2m. In real terms, recovery appeared impossible, or seemingly so. The larger University required a change in operational model. What was certainly unacceptable was to maintain the existing model of operation. The conservatorium, in simple terms, spent considerably more than it earned. The task called for a radical rethink of direction and operation. The issue of sustainability required immediate and focused consideration.

The notion of sustainability meant a degree of diversity unfamiliar to CQCM prior to 2000. The notion was best captured by Willcocks and Sauer (2000) as they suggested 'sustainability is not achieved through any one thing. It requires the combination of a range of resources and services that together are hard to imitate.' (p9)

That sustainability had been made possible with the expansion of undergraduate offerings, growth of full fee-paying post-graduate initiatives, development of performance and media profile; and the incorporation of the University's Language Centre into the CQCM 'holdings'. The developments were deemed sustainable for the next five years.

	1999	2000	2001	2002	2003
Student Num- bers	86	210	290	365	435
Postgraduate	0	50	90	115	130
International	0	15%	30%	40%	35%
Performances	*	108	178	344	450
Media Hits	*	103	238	469	670
External Publications	*	6	9	10	32
Internal Publications	*	13	42	43	50
Grants/Consul- tancies	*	0	72,500	77,400	230,000
Delivery Sites	1	5	7	8	10
Gross Income	lm	2.3m	4m	3.6m	4.2m
Accumulated	(lm)	300,000	950,000	1.2m	1.7m
Net Profit/Loss	-350,000	327,000	590,000	296,000	500,000
Auditions	56	88	92	149	165
QTAC 1 st pref- erences	63	78	86	91	110
QTAC total	137	168	211	197	275

Using the 15 metrics in the table, it was evident that revitalization growth had been significant during the first four year period (2000-2003) of the revitalization process (equivalent full time student growth from 86 to 435; post graduate growth from 0- 130; international student growth from 0% to 35% of total population; delivery site proliferation from 1 to 10; gross income rose from \$1m to \$4.2m; and an accumulated deficit of \$1m changed to a projected accumulated surplus of \$1.7m. It was anticipated that the Conservatorium would undergo further growth during 2004 followed by a plateau in 2005 (maintaining a \$5m gross income) and beyond. In order to encourage this growth (2000 and beyond) and ensure that the achievements were sustainable beyond it was necessary to ensure that the diverse activities were effectively combined and efficiently mancomponents aged and that the contributing were complimentary, supportive and integrated.

A new structure within the Conservatorium assisted the management of the individual parts allowing for useful synergies between these segments. The following table gives an indication of the projected overall income from the five elements (in gross income terms) within the larger design:

Revised Component	End of 2001 income	End of 2003 income
Undergraduate Courses	\$1.5m	\$1.8m
Postgraduate Courses	\$.8m	\$1.5m
Virtual Conservatorium	nil	\$0.30
The Language Centre	\$1.2m	\$1.2m
Profile and Performances	\$.3m	\$.2m

A comparison of the actual 2001 income sources compared to the 2003 sources

The projected surplus for 2003 was \$800,000, this was an achievement for any conservatorium at the time, but clearly

possible in the new economy. The diversity achieved within the Central Queensland University context was difficult (if not impossible) for other competitors around the country to imitate given the usual singular music focus and application. The diversity had much to do with multiple locations, a broad range of program offerings, and the ability to procure elements within the larger university such as The Language Centre. Conservatoria, throughout the country, had a primarily music performance and practice focus and would consider a break-even scenario the best score possible — in most cases unlikely - as their concentration was on the maintenance of a high-cost student staffing ratio.

Why there was a need for 'The Virtual Conservatorium'

The Central Queensland Conservatorium of Music in Mackay opened its doors in 1989 as a regional campus of the Queensland Conservatorium of Music (now QCGU). The Mackay campus was initially a feeder for the larger Queensland Conservatorium, offering the first year of a Diploma of Music, with the two subsequent years to be completed in Brisbane at QCGU. Further developments in the next few years saw the two-year Associate Diploma (which was completely offered in Mackay - but assumed that students would further their studies in Brisbane), with the first year of the Bachelor of Music being approved to be offered in Mackay. In 1996, after recommendations initiated between 1987 and 1994 by John Dawkins, Federal Minister for Employment, Education and Training, the Central Queensland University assumed control of the Mackay Campus of the Conservatorium. Griffith University, concerned about the rising costs of running a regional outpost, had no objection to this arrangement. The June 1999 Central Queensland University Council minutes note:

> 'Council endorsed the recommendation to the Vice-Chancellor of the Planning and

Development Committee that from 1 January 2000 the Central Queensland Conservatorium of Music (CQCM), while retaining its name, integrity and distinctive roles and responsibilities as a conservatorium of music, become an academic entity within the Faculty of Education and Creative Arts, with the Director of the CQCM having the responsibilities and accountabilities of a Head of School within the Faculty, as well as any responsibilities and accountabilities relating distinctively to the Conservatorium. It was agreed that these new structural arrangements will be reviewed at the end of two operational years'. (p. 12)

As a result, the newly named *Central Queensland Conservato- rium of Music* progressively relinquished academic pathways with QCGU and existed as a separate entity to the Queensland Conservatorium, Griffith University (QCGU). Karmel (1997) explains the rationale behind the amalgamation: In the middle of 1987 John Dawkins became Minister for Employment, Education and Training and proceeded to institute a number of revolutionary changes in higher education ... the binary system of universities and colleges of advanced education was eliminated and replaced by the Unified National System. This resulted in a broadening of what was understood by the term 'university'. The creation of the Unified National System involved the merging of many institutions in order to reduce their number and increase their size.' (p. 12)

During the next few years, CQCM continued to mirror the operational and academic processes of QCGU, despite its independence. By 1999, CQCM was in the unfortunate position of not being able to fill its full-time student quota, operating in an ever-increasing deficit scenario and threatened closure.

	1997		1998	
	Projected	Actual	Projected	Actual
Income	\$980,588	\$978,282	\$1,055,200	\$887,906
Expenditure	\$978,984	\$1,356,542	\$1,073,750	\$1,260,110
Balance	\$1,604	(\$377,260)	(\$18,550)	(\$372,204)

The Shepherd Report in 1999 incorporated further recommendations including the reintroduction of a Classical/ Contemporary course that eventuated in late 1999 as the Bachelor of Music/Performing Arts, which is now at the core of the undergraduate offerings of *The Virtual Conservatorium*. A second recommendation was the development of a Masters' program which also eventuated in 2000 in the form of the Master of Arts Administration which has become the core of the post graduate offerings of *The Virtual Conservatorium*.

To further develop these ideas and in an effort to keep the Conservatorium as a viable entity maintaining student numbers and balancing/creating a modest surplus budget, major restructuring was required. The two most obvious areas to restructure were the full-time staffing and the concerts' budget. The concert program was rationalised and conducted on a more effective income/cost basis. More efficient and effective ways to deliver CQCM coursework had to be implemented in order to reduce staffing costs. In 2000 these objectives were essentially achieved but a major change in pedagogical design and thinking was required for further impact — the concept of *The Virtual Conservatorium* was one such opportunity.

In 2000, with the appointment of a new Director, CQCM underwent a dramatic turnaround, in a very short period of time. At the completion of the first year (2000) the conservatorium not only balanced its budget but also achieved a modest operational surplus. The year 2000 also saw CQCM achieving student quota within the undergraduate programs for the first time in a

number of years; expanding the operation to include delivery of product to five sites (Mackay, Rockhampton, Bundaberg, Gladstone and Sydney); and an evident University commitment to the future of CQCM with the construction of a new building in Mackay to serve as the Head Office. During this same year staffing positions were ratified and course offerings also examined.

The operating context was perfect for developing new teaching methodologies and creating a new conservatorium with a business rationale unlike any other in Australia

— the concept of *The Virtual Conservatorium* was born, a 'new conservatorium for the new economy'. Kelly (1998) reinforced the notion of developing networks, locations and the distribution of programs/offerings, 'The great benefits reaped by the new economy in the coming decades will be due in large part to exploring and exploiting the power of decentralised and autonomous networks'. (p19) CQCM was in a position to explore new opportunities and designs.

CQCM Conservatorium offerings prior to 2000

According to the 1998 electives handbook CQCM offered 98 elective courses to an internal student body on the Mackay campus of approximately 80 full time students. A further twelve 'practical' courses were also available, bringing the total offerings to 110 courses. Given the size of the campus and student numbers this was excessive. Each course available was taught in face to face (F2F) mode on a regular weekly basis. This teaching requirement utilised 17 full time staff, together with a number of casual staff. With a gross income in 1998 of \$887, 906 and a staffing cost alone of \$962,493 (108 per cent of the total gross income) - a continuing deficit situation in this type of operating environment was inevitable. This area needed immediate addressing.

As a result, in 1999 and 2000 course offerings were reduced and vacant staff positions made redundant, resulting in a minor

operational deficit in 1999 of approximately \$100,000. This rationalisation limited the educational opportunities of CQCM undergraduate students to a specific set of taught classes in a single mode (F2F). This reorganization of subject offerings represented the beginning of what was to be a more major change process.

Staffing

Significant staff changes in Mackay location reducing full-time lecturing staff from 17 to 7 occurred during the period 1999 and 2002. Of the remaining Mackay campus staff, three coordinating degrees and one being the Director (who also coordinated the post graduate program). The Rockhampton location experienced a similar change from five to three full-time academic staff during this same period.

'The Virtual Conservatorium relied on an innovative model of staffing that utilised a range of people in a range of locations who are prepared to be flexible in terms of availability and product delivery. It called for a new kind of staff member who was prepared to work inside a new paradigm rather than just fulfill contractual lecturing requirements. A new breed of staff was required to support this initiative and at the same time be innovative and creative. This notion of innovation is concisely defined by MacKenzie (2001) as '... positive change resulting in new products, services or processes. It is well understood that to successfully implement positive change, staff must accept ownership of the change.' (p. 20) It was important, from the outset, that staff involved in the new model had a strong sense of ownership and felt that their contribution was important and valuable even though they were predominantly part-time/sessional staff members.

A change in focus

The growth and diversity of the business achieved at Central Queensland Conservatorium of Music was a result of the management mindset that had the view that a conservatorium must be multi-faceted and incorporate a broad cross - arts platform. The proposed *new conservatorium* model was an assertive (possibly even aggressive) business that maintained high levels of accountability and reporting and at the same time pursued 'out of the square' opportunities to enhance its portfolio. This *new conservatorium* had the flexibility to respond to the new economy environment through modeling itself on corporate exemplars to maximize the economic benefits.

The Central Queensland Conservatorium of Music responded to its near demise (threat of closure in 1999 as raised in the commissioned Shepherd Report) by reinventing itself and repositioning itself in a larger and more responsive market, including seven additional sites of operation. It could be argued that the 'inventiveness' of the management team that was responsible for the growth and renewal provided the necessary sense of optimism in the tertiary music environment — not apparent when compared with competitors across Australia. Herceg and Flattery (2000) agreed with the basic proposition in stating that 'Ideas and the ability to constantly come up with them will be one of the most highly prized skills in the new century.' (p. 18)

The maintenance of this creative and innovative environment ensured that creative thinking was uppermost from a planning perspective in ensuring the future success of the conservatorium in the years to come. With this in mind, we attempted to put in place a number of new mechanisms that would ensure better communication between the sub - elements and thereby develop effective and efficient strategies for further development.

In order to achieve the targeted 400% percent gross income growth 1999 to 2003, it was necessary to ensure that the contributing elements worked and grew co- operatively. In order to achieve the projected \$500,000 surplus in 2003 maximum synergy and co-operation between elements was essential, not to mention a sustained commitment to innovation and creativity. In March 2001, within the context of this changing model of *the new conservatorium*, the concept of *'The Virtual Conservatorium* existing within the main entity of the Central Queensland Conservatorium of Music (CQCM) was raised as a potential way of maximizing its positioning and effective operation.

The business opportunities for Central Queensland Conservatorium of Music

Prior to 1999, the financial 'ceiling' of CQCM was capped at a maximum of 90 EFTSU with the possibility of only a few international students. This equated to an annual income of approximately \$900,000 with little prospect of future growth. *The Virtual Conservatorium* allowed for increased numbers in undergraduate and postgraduate programs and effectively removing the limitations of a 'capped' annual income.

By developing programs that can be delivered 'anywhere, anyhow, anytime', students from within the faculty in which the conservatorium resided (Faculty of Education and Creative Arts) and from other faculties of the university, could now manage to enroll in courses offered by CQCM without conflict. This concept of "intra' and 'inter' faculty offerings increased the total possible enrolment population base and ultimately class sizes. With greater class sizes, improvements in economies in course delivery were the result.

The creation of materials suitable for delivery via *The Virtual Conservatorium* would have to go beyond traditional distance education packages and current online materials. Simply creating pdf files of written material from existing class material or just

videotaping on-campus lectures (as in VAL-video aided learning) was only duplicating the process other Australian universities were badging as online. Specifically designed and delivered DVD/VCD to be clear and precise, online material that had a viable web navigation processes and Software Based Learning packages were just a few of the new delivery methodologies that were being implemented. The specificity of this course delivery ensured that the quality would improve from traditional distance analogue learning pedagogies. This would directly have an effect on the quality of the on-campus delivery as these students will have access to these same materials.

CQCM's academic existence for the first 10 years was limited solely to Mackay. A Bachelor of Education (music) was operating in Rockhampton up until 2000 but it was limited to Rockhampton and its demise in the fact that it could not attract suitable applicants from the narrow catchment area. With the development of *The Virtual Conservatorium*, it was predicted that the footprint of CQCM would grow beyond the Capricornia Region to become a truly state-wide (undergraduate) and national (postgraduate) conservatorium entity.

Opportunities

A number of opportunities presented themselves to an organization that was capable of re- inventing itself. In the first instance, access to a greater marketplace and population was readily available if the organization was prepared to establish a network of delivery sites. In 1999 CQCM delivered product to Mackay — in 2003 CQCM delivered product to ten sites throughout Queensland and Australia. Secondly, the establishment of a partnership with Learning Network Queensland, with its forty-one centres throughout Queensland, meant that CQCM product could be further delivered at any of these sites. This kind of extension was only possible through a strategic alliance of this kind. A third opportunity was the 'niche' market that was

attracted to a project like *The Virtual Conservatorium* which did not duplicate the standard offerings of most other conservatoria throughout Australia.

Technical Problems

There were a number of technical difficulties to overcome from the outset. The nature of the original conservatorium site in Mackay was technically inadequate in so many ways. Staffing technical ICT expertise was low in 1999 and considerable cost, time and effort had to be put into 'up skilling' staff in a range of areas including multimedia design and development - and use of the internet. The bandwidth and subsequent speed of the technology available was inadequate along with the backup and technical infrastructure.

A move to new premises

By 1999 Central Queensland University and the Queensland State Government had committed to the construction on the new purpose built CQCM building. Koch (1999) records conservatorium history when she writes 'At present the CQC(M) is housed in rented premises, but Professor Chipman said that the aim was for the new campus building to be in operation by the year 2000.' (p. 29). The facility was delayed, for a number of reasons, but was accessible from June 2001 and formally opened in November of the same year by the Queensland Premier.

Growth in technology interest and hi-tech teaching spaces across the university

The University had, over a period of ten years, encouraged developments in remote learning techniques. On the one hand, VAL (video aided learning) tapes that were VHS copies of lectures given at one campus and forwarded onto students in other campuses, to technologically advanced ISL (Integrated System-

wide Learning) lecture theatres that could send or receive real-time lectures from other campuses within the University. The level of sophistication was impressive with excellent flexible delivery options well suited to *The Virtual Conservatorium*. This platform was fortuitously available for the start of 2001 and allowed the opportunity for the creation and expansion of *The Virtual Conservatorium*. A dedicated ISL Laboratory was a feature of the new conservatorium complex located in the common teaching spaces within the third building. Access was now available to all CQCM teaching staff via a central booking system mechanism.

In order to facilitate the technology base for the initiative the CQCM Project Manager appointed (at the commencement of 2001) to manage the new building precinct ensured the ethernet access within the building would sustain the intended electronic based objectives of www delivery of product. This required a deal of consultation and co-operation between the architects, the University's Information technicians, electrical consultants and technical advisers. CQCM was required to update internal hardware and software to maximize the opportunities available.

eRolment as university standard

The larger university (Central Queensland University) had made significant changes to its operational procedures as outlined in a review of (amongst other things) the student management system. Under the title of 'Project Renaissance' (established in 1999) the University invested in a new student system that allowed for electronic access for all users via the central portal 'eRolment' located on the university website. The following extract from the University's Statement of Strategic Intent 2001-2005 highlighted the climate:

'Central Queensland University's rapid growth and expansion of commercial activities have highlighted the need to improve its information systems, administrative processes, and underlying planning, management and quality assurance structures. Responding to this imperative, the University has invested major resources (\$20M) to implement new PeopleSoft administrative systems.'

New Director — New Vision

A strategic plan presented to the interview panel by the subsequent appointee demonstrated a strategy for a structured process of change to the budgetary situation from the deficit scenario being experienced to delivering a modest profit margin from the first year of appointment onwards. One of the strengths demonstrated by the Director was his evident support of staff ideas and opinions. Herceg and Flattery (2000) note that ... ideas are now much more than child's play. Ideas and the ability to constantly come up with them will be one of the most highly prized skills of the new century' (p. 18)

In addition to recognising and encouraging staff involvement, it was important to act upon ideas and initiatives quickly and efficiently whilst they still have currency in the marketplace and are relevant and pressing. Jennings and Haughton (2000) recognised this need for action and speed, 'Fast thinking won't get you very far unless you're able to quickly process your thoughts and make a decision. Nothing slows down an organisation more than paralysis by analysis — the inability to make even the smallest decisions quickly' (p. 69)

To be a successful business venture 'The Virtual Conservato-rium needed to be able to anticipate and react quickly to the customer's wants. Contemporary business practice in the global market required speed and dynamism. This was a distant call from the traditional operation of conservatoria in Australia given the bureaucracy and conservatism evident.

The appointment of a new Director at the commencement of 2000; the proposed move to a purpose built multi-million dollar site; the proposed notion of extending the conservatorium offerings to multiple sites; the relocation of the conservatorium, mid 1999, into the larger Faculty of Education and Creative Arts identity; the poor financial performance of the Mackay site between 1996 and 1999; and an impending sense of re-invention all contributed to the possibility of developing a new and improved organization. In addition, the conservatorium staff (in both Mackay and Rockhampton) were ready for change and subsequently were responsive (or at least not opposed to) some rethinking and redevelopment.

Management Support

The driving force behind the project was key senior staff. The Dean of the Faculty of Education and Creative Arts (EDCA), the Director of CQCM and designer of the Master of Arts Administration (MAA), and the Coordinator of the Bachelor of Music/Performing Arts (BMPA), worked well together to ensure progress of the initiative. One of the key elements in establishing The Virtual Conservatorium project was the speed of development. The innovation was tabled at the beginning of 2001 and commenced operation at the postgraduate level in mid-2001 and undergraduate operation at the commencement of 2003. LeBoeuf (1993) reinforced the need to move quickly, '... today's rapidly changing business world requires moving quickly ... it does mean taking a whole new focus and approach to working, selling, managing and leading to speed up the business.' (p. 13) This meant that the initiative moved quickly beyond the discussion phase and avoided unnecessary, but often inevitable, roadblocks and diversions.

The restructure of undergraduate degrees

A new degree, the Bachelor of Music/Performing Arts (BM/PA) was designed and implemented to replace the outdated Associate Diploma with greater flexibility and cross enrolment options. A restructured Bachelor of Jazz Studies degree involved removing some of the more expensive and non-vital aspects, such as second instrumental studies, was instigated in the 1999 and 2000 time frame. Rationalisation and reduction of superfluous courses across the conservatorium witnessed the total number of subjects offered decrease from 97 to 46.

The course structure for the Bachelor of Music/Performing Arts (BM/PA) was revamped with a view to a range of flexible delivery mechanisms (such as online; CD Rom and multi-locational F2F). This new and revised model worked well for both on - campus and off -campus opportunities.

A change in mind set

In order to facilitate these kinds of paradigm shifts a change in mind-set was required. We began this examination with the view of the world from within a university element. Covey (1992, p.60) highlighted what he called a 'scarcity mentality' that myopically focused on students as a single finite pond that has given characteristics and is subject to relentless internecine competition so that it was always over-extended. Covey further (1992, p.40) contrasted this with an 'abundance mentality' that centred on an infinite number of possibilities, each representing 'new' opportunities and new models for astute and well-focused interests. Our view was that in many ways a change of mind-set by academics and administrators from conventional teaching and research or bureaucratic practices respectively was undoubtedly the most painful part of the re- engineering process. It challenged almost all the deeply held 'scarcity' convictions including management hierarchies; ranked seniority; centralised

staffing policy which was frequently shown to be inflexible and inefficient; large group decision-making which while being nominally 'democratic', spread the fear of blame to a larger forum and delayed decision-making; and a 'core business' mentality that restricted elements to the borders of artificially defined administrative fiefdoms on the grounds of 'credibility' and 'quality' but that condemned universities to draw only 'inside the lines'.

Some organisations had the 'scarcity mentality' so deeply entrenched that part of the core business was actually about maintaining the mission of 'scarcity'. Brodsky (1998, p10) stated it well. 'Some companies, in fact, have developed a core competency in the area of squashing visionaries. They have developed an institutional immune system that systematically attacks and destroys visionary thinking, like white cells attacking an infection'

The change in mind-set from a belief in only one 'pond' to an acceptance of the conviction that it is worth the trouble to deal with many 'ponds' was the most difficult aspect of the organisational changes necessary to re-orient the worldview of universities and of course, their financial operations. Central Queensland University had adopted the multiple site context evidenced in the current 14 sites available for product delivery. Given the University's long-term commitment to external studies and flexible delivery it came as no surprise that the notion of *The Virtual Conservatorium* was well received from the outset.

Changes to management style

To facilitate the establishment and effectiveness of a new venture unit (such as *The Virtual Conservatorium* management unit) changes to management style were necessary at the macro, meta and micro levels of the organisation. At the larger university level (macro), there needed to be support for the unit's existence and a capacity to deal with proposals that are 'outside' or challenge conventional ways of doing things. At the

element/faculty/school level (meta) there needed to be a supportive environment that enabled rather than punished the unit in such areas, for example, as space allocation. At the level of the unit (micro) styles of self- management that facilitate flexibility and autonomy were required. Limerick, Cunnington and Crowther (1998) capture what we meant here. 'Collaborative individualism is the dominant culture of network organisations: it stresses the need for individuals to work together with others towards a common vision and mission. But it also stresses their emancipation, their freedom to reject hierarchical organisation and bureaucratic rules.' (p. 102)

This style of operation was excessively problematic for organisations that had a 'scarcity mentality' coupled with traditional hierarchical, bureaucratic structures and processes. Such an organisational and management environment depended on restricted communication and group-oriented process concepts that stifled individual initiative or so modified ideas and plans that they ceased to be interesting for their developers. Levinson (1996) describes the nature of this style of environment.

'The forces changing the world in which we work and live have also changed the relationship between the employer and the employee. A psychological and practical result of these changes is that we are now living in a new age of self-reliance. On a personal level, we must get feedback, advice, and moral support from family and friends. On a professional level, we each need to develop fallback positions. By fallback, I mean an alternative course of action if the current job fails us. In today's world, we need to worry less about the next rung up the ladder and more about the variety of opportunities available to us should the ladder disappear - and we find ourselves thrown back on our own resources.' (p. 162)

In our view, a shift to management styles such as 'collaborative individualism' and the priority of concepts such as 'intangibles' in university life would undermine the value of committees, working parties, task forces, program management teams and the like. Rather, the approach would require a collaborative group of individuals who contributed to the success of the agreed mission and/or task at hand. They would be committed to the given mission but work to a large extent individually from a nominated site (like 'work') but increasingly elsewhere (like 'home'). Sinclair (1995) states:

'Teams are seductive because they promise inclusion, comfort and belonging. Defined as task-oriented, and united around a common goal, teams promise to remove from organisational life intractable conflict and divisiveness. Reinforced by pictorial images and case anecdotes of jolly workers sharing the load, these tales of 'teamness' portray groups which have overcome, one is asked to believe, frustration, boredom, jealousy, resentment, and prejudice.' (p. 58)

It was not difficult to imagine the new roles and capacities that would emerge from and be necessary for new work styles. If a new kind of creative individual, the 'gold collar' worker (Kelley, 1985), is to strengthen the university, each of the levels we have indicated needed to accommodate these new workers who

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'... hold the key to the future.. perhaps the most significant difference (between them and 'white collar' and 'blue collar' workers) pertains to the nature of their work and the freedom and flexibility with which they conduct it. They engage in complex problem solving, not bureaucratic drudgery or mechanical routine. They are imaginative and original, not docile and obedient. Their work is challenging, not repetitious, and occurs in an uncertain environment in which

results are rarely predictable or quantifiable. Many gold collar workers don't know what they will do next, when they will do it, or sometimes even where.' (p.8)

The idea of a 'skunk work' (autonomous venture unit) appeared to be the kind of activity that would attract these so-called 'gold collar workers'. In order to bring about the full potential and financial benefits of projects and initiatives that lie 'outside the square' the type of person needed would be highly motivated from the outset; self-directing and highly enthusiastic — often difficult to find in the traditional conservatorium environment.

Academic Year

As part of an ongoing commitment to innovation and flexible design, Central Queensland University introduced a model for a four-term year (Summer, Autumn, Winter and Spring) in place of the more traditional two semester model (Autumn and Winter). The two new terms (Spring and Summer) were offered over the traditional summer vacation period, which allowed students access to *The Virtual Conservatorium* all year round. This meant that *The Virtual Conservatorium* was able to offer product in multiple locations during an eleven-and-a-half-month period each year allowing students ongoing access to courses and the opportunity to 'fast track' their awards if they wished.

Industry mentors

An important aspect of the *new conservatorium* was the involvement of industry practitioners. As an integral part of *iCon*, key industry professionals were approached to act as mentors. All approached accepted the opportunity to be involved. Most viewed the concept of working with conservatorium students

and staff sharing insight into the nature of the music industry as attractive and personally rewarding. The payment scheme for services was generous making the task financially worthwhile. The list of mentors had grown over the period 2000-2003 and would continue to grow and diversify over the next few years.

Examples included -

Industry Mentor	Location	Area of Expertise
Don Burrows	Sydney	Jazz Icon
Don Rader	Sydney	Australian jazz profile
Kevin Hunt	Sydney	Australian jazz profile
Graeme Connors	Mackay	Australian singer/songwriter
Art Phillips	Sydney	President — Australian Guild of Screen Composers
Nancye Hayes	Sydney	Australian Music Theatre Icon
James Morrison	Sydney	Jazz Icon
John Curro MBE	Brisbane	Notable Australian Conductor
Professor Simone de Haan	Brisbane	Director — Canberra School of Music
Professor Phil Hayward	Sydney	Head of Music School - Macquarie University
Brian Cadd	Melbourne	Australian singer/songwriter
Peta Doodson	Melbourne	Australian Acting Identity
Michael Turkic	Sydney	Australian Directing Identity

Work locally — think globally

From the outset we believed it was useful to think globally even though you may only work locally. All products and services should be internationalised for domestic and possible foreign use. In order to ensure and profess international quality 'global competence' was essential. Benchmarking was a useful tool in this instance. Kanter (1995) and Hodgetts (1995) both asserted that globalisation and internationalisation are at the

core of any multinational or even local success. The notion is best summed up by Hodgetts (1995)

'... in order to fully understand multinational businesses, one also has to look at the places in which they operate, the countries from which they emanate, and the interactions they have with suppliers, customers, venture partners, and a work force, which is usually inherently local.' (p. 57)

Universities, and most elements within them, typically made claims of national and international status and reputation in mission and other statements that had a telling sameness about them. In many instances it was difficult to ascertain how these reputations or claims could actually be validated at the level of teaching and industry exposure. We proposed a simple rule of thumb. To be a truly national program a given course must have current national staff; current national students; and it follows, the course should be available nationally in a variety of locations. In turn, to claim international status a course must have current international staff; current international students; and be available internationally in a number of locations. *The Virtual Conservatorium* aspired to such a benchmark. Central Queensland Conservatorium of Music, in 2003, offered product in ten locations including three states.

Governance

Effective governance was based on the development of clearly articulated and appropriate sets of goals. Clear mission statements and/or objectives required careful consideration and articulation. The exercise of then developing access depended greatly on how the mission statement was reworked to cater for 'new' students and in turn could be examined in the light of the experiences of students who had attempted to work within the

parameters. The clear detailing of objectives that reflected providing greater access for students would need to be constantly evaluated in the light of practices.

Bowman (1990) stated that a good mission statement might include a statement of beliefs and values; a statement of the needs that the firm will satisfy; a statement of the markets within which the firm will trade; a statement of how these markets will be reached; a statement of the technologies that the firm will use; and a statement on attitudes to growth and financing. He further added - good mission statements or 'visions' are inspiring and exciting. They need to be specific enough to act as a 'tie breaker' (eg, when it comes to the crunch quality is more important than meeting delivery targets), whilst at the same time it should be general enough to leave room for people to exercise initiative.' (p. 36)

Clearly, effective mission statements must be well thought through, articulated in achievable terms, and provide some scope for individual and/or group initiative. In this way governance issues reflected a clear direction but also incorporated a level of flexibility that made it possible for providers to respond appropriately to the changing needs of clients.

Further, Beare, Caldwell, and Millikan (1989) in a school management context, highlighted a number of key principles that were fundamental to mission statements when used in education settings. Statements should define 'what we want to become, rather than what we are doing'; statements should use appropriate criterion for defining the business'; statements should be well balanced in terms of neither being too narrow or too broad; Statements should not be filled with empty phrases and terms; statements should provide those effected by them with a clear understanding of their implications; and statements should be concise, short and fewer than 25 words. In addition, David (1986) in the context of strategic planning concluded that mission statements were about customers, products, markets,

technology, survival, growth, profitability, philosophy, self-concept, concern for public image, effectiveness, and inspiring quality. Peeke (1994) considering the three previous suggestions concluded that a mission statement should have certain characteristics including a clear specification of the nature of the enterprise; a reflection of the organisation members; specification of markets and customers; specification of beliefs and values prized by the organisation; specification of the technology in use; specification of the organisation's growth policy; and stated in general terms to allow flexibility but specific enough to assist with the establishment of priorities.

Each of the views reinforced the notion of clear articulation of goals and objectives, often in market terms, with scope for adjustment and reworking if and when the context demanded it. In turn clients would become increasingly willing to evaluate and comment on the way in which the provider caters for their specific and general needs. Students would be asked to reflect on how the institution actually fulfils its obligations. 'Perhaps the most important single issue to emerge from the discussions of governance is that of accountability' (Schuller, 1991, p.8).

Quality

Schuller's (1991) fourth point is that of 'quality' while acknowledging that '... not all institutions should aspire to qualities of the same kind' (p.10). The very process of determining the needs of clients for particular initiatives would in turn produce the types of qualities that need to be demonstrated. If, for example, a particular client group within a particular initiative clearly required the emphasis to be placed on technical know-how, the institution required a shift in emphasis to the provision of quality technical expertise. This in turn may require additional funding and responsibility on the part of the institution. It may also mean that an institution incapable of providing technical expertise or the funding necessary to procure it may need to

reconsider offering the initiative in the first place. Universities were often in need, however, of extending themselves into unfamiliar areas. This required the retraining of staff or the development of financially rewarding initiatives that provided appropriate resources to move into distinct and appropriate demand areas. In this scenario, the future of quality performance rested largely on self-funding programs that are capable of supporting themselves in terms of resources and personnel.

Given the case presented so far, we isolated three issues identified by Schuller (1991), namely a different time structure: shorter cycles and an end to full-time versus part-time enrolment status; human resources and managing change; and continuing education. These are central to the definition of flexible delivery provided earlier. We briefly outlined these issues before using them to structure a literature review.

'The Virtual Conservatorium best thrived in an environment that did not mean isolated, individual, personal computer - centered education. The mass media portrayed this negative image that virtual and innovative technologies were synonymous with exclusive interaction with a computer. This image suited the Hollywood stereo-typecast scenario at the time, but on the whole, bore little resemblance to the impact of the overall possibilities of the virtual landscape.

'The Virtual Conservatorium instead was an innovative mix of traditional and new pedagogical approaches to the process of Arts education with a modern and structured entrepreneurial business strategy. By combining various disparate disciplines, a virtual network could be established. Not all the elements that combined to create this network needed to be groundbreaking inventions. Traditional methodologies did not have to be discarded but rather redesigned and approached with an open and creative mind. These issues and conditions presented provided the opportunity and the premise on which 'The Virtual Conservatorium was initiated.

SCOPE AND GOALS

In this chapter we focus on the scope and goals of the project. Fundamental to our design and progress was the need to extend our catchment area in terms of student numbers and locations. Our notion was that student numbers, achieved partly through multiple sites, were closely linked with gross income and subsequently organizational wealth and prosperity. This expansion, though, required a rethink in terms of practices and programming.

In Chapter 1 we discussed how a conservatorium in a geographically isolated area with a relatively small catchment area could survive and thrive in the 2000s. Global conditions were discussed along with 'macro-conditions' that affect the Australian University system and conservatoria in particular.

We moved forward in our discussion about developing new designs and strategies for the new environment.

The goals this project attempted to achieve both technically and from a business point of view

In order for Central Queensland Conservatorium of Music (CQCM) to maintain an innovative momentum there was a necessity to create a product that could transcend the limitations of *on-campus* tertiary music delivery. *The Virtual Conservatorium*

project had as one of its foci the creation of a level of financial viability for CQCM that could only be achieved by metamorphosing into an entity that had a larger potential student catchment than the current on-campus arrangements. To achieve this *The Virtual Conservatorium* also needed technical, curricular and delivery development beyond that of traditional on-campus university environments. Nelson (2002) provided a valuable overview -

'Developments in communication and technology have transcended traditional boundaries, creating the possibility of worldwide communities. The demand for the services of universities is no longer restricted to the surrounding area but is coming from a much more extended constituency. The demands of these new constituencies will require universities to develop new service delivery systems and create virtual places in which they can operate and compete on a global scale.' (p. 20)

The delivery mechanisms and virtual environments referred to above were the basis of the technical scope of this project. In more global terms the trends were similar. Universities in the United Kingdom and the United States of America were experiencing the same conclusions. Universities that failed to make this transition and continued to rely on single campus classroom modes of operation would struggle to compete and adapt to change. As The University of Exeter's Academic Affairs Committee (2000) reported -

'The committee was concerned with the fate of the Music Department. The current situation is very fluid. The department has lost its best researcher to Manchester and is not financially viable as a department. It requires too much money to bring its

facilities up to scratch. The department has been asked to prepare its own proposals to save itself from the axe ...' (p. 1)

In direct contrast with this, universities that had been able to adapt to these changes had demonstrated substantial growth and viability. On the 'Phoenix Online University's homepage' (2003) it was underlined that the model "provides students with the same quality education, curriculum, faculty and resources offered to over 140,000 University of Phoenix students at over 125 campuses and learning centers across the US."

There was a direct correlation between student numbers and financial viability. In 1999 CQCM was servicing a single site in Mackay with only on-campus students. In 2003 CQCM was operating as a multi-campus multi-modal operation, and the results were evident.

	1999	2000	2001	2002	@ July 2003
Student Numbers	86	210	290	365	432
Postgraduate	0	50	90	115	130
International	0	15%	30%	40%	32%
Delivery Sites	1	5	7	8	10
Gross Income	Inn	2.3m	4m	3.6m	3.8m
Non-Government funding	*	36%	69%	64%	48%

To achieve these gains the traditional model of single campus, classroom-based teaching needed a considerable make-over and manipulation to suit a wider range of student learning requirements. To facilitate this, CQCM had to first identify the target consumer market group(s) and then create materials that suited the emerging demographics. In the Central Queensland University Undergraduate Prospectus (2002) and the Central

Queensland University Undergraduate Handbook (2002) the University's Vice Chancellor made a clear statement of intent in her Welcome to CQU:

'Central Queensland University enjoys a reputation as one of Australia's most progressive and innovative universities. In both teaching and research, our highly qualified and internationally recruited staff place emphasis on finding new and challenging new frontiers in our specialist areas of the arts and music.'

This statement was in part the impetus for the creation of *The Virtual Conservatorium*. The notion of moving beyond the existing frontiers into more challenging environments was irresistible.

The goals

To achieve financial independence and viability CQCM needed to establish an increased gross income that in turn ultimately would lead to a positive net outcome. This could be achieved in two ways: first, improve delivery efficiency; and second, reach a greater student population base. Ideally a combination of both could be achieved.

The Virtual Conservatorium was initially designed to provide students with the opportunity to complete an undergraduate Bachelor of Music/Performing Arts and/or a Master of Arts Administration in a multi-modal, virtual environment. With the creation of materials for these student markets there were a number of further potential student marketplaces that could utilise, either completely or partially, the materials created. The underlying ethos of the project was to deliver music education to a wide range of students 'anywhere, anytime and anyhow'. The student demographic included:

Virtual postgraduate

- Virtual undergraduate
- Mackay on-campus undergraduate
- Rockhampton on-campus undergraduate
- Central Queensland University students (faculty transfer)
- General population for award (full fee)
- General population for interest (no fee)

Virtual postgraduate offerings

The Virtual Conservatorium had an unlimited number of places available for students wishing to study in the Master of Arts Administration program. All courses within the MAA online were offered in a variety of multi-modal delivery designs. The students came from both domestic (4 States and 2 Territories) and international (3 countries) sources.

Virtual undergraduate offerings

'The Virtual Conservatorium had seventy-five funded places for Queensland based full-time students over the first three-year period (twenty-five each year) available in the undergraduate Bachelor of Music/Performing Arts in virtual mode. The first intake of students in 2003 was scattered along the Queensland East Coast with hubs in Mackay, Rockhampton, Bundaberg and Brisbane.

Mackay on-campus undergraduate offerings

In 2002, the conservatorium site in Mackay was at full capacity with 112 full-time on- campus students. All of these students, in fact, were involved indirectly in the offerings of *The Virtual Conservatorium* through the Bachelor of Jazz Studies, Bachelor of Music Theatre and Bachelor of Music/Performing Arts undergraduate degrees. The necessity for forward planning and

embedding new delivery methodologies within the traditional model was supported by Baghai, Coley and White (1999) -

'As a company's business and revenue streams mature, it must have others ready to take their place. If continual growth is the goal, the pace of replenishment must be faster than the pace of decline. To sustain growth there must be a continuous pipeline of new business that represents new sources of profit.' (p.153)

To meet the changing demands of on-campus students, we had predicted that the flexibility of study modes would require the implementation of virtual methodologies to be utilised in areas of *on-campus* academic and practical courses. This prediction was realized in 2003, when the on-campus students requested access to the electronic and virtual materials in preference to the print materials that were previously provided.

Rockhampton on-campus undergraduate offerings

63 full time on-campus students in Rockhampton were involved indirectly in 2002 and 2003 in the offerings of 'The Virtual Conservatorium through the Bachelor of Performing Arts undergraduate degree. A number of the courses were available online and in intensive mode supported by The Virtual Conservatorium management team.

Central Queensland University students (faculty transfer)

The undergraduate student base within the conservatorium was limited to a population of approximately 230 students. Central Queensland University had an overall student undergraduate population of approximately 10,000 students. As students from all programs were able to access courses taught via 'The Virtual Conservatorium', this had the potential to expand CQCM's student access by almost 4,000%. Central Queensland

University had the policy of faculty funding transfer that allowed students to take courses from a faculty other than their own with the associated funding attached to that course being transferred to the faculty delivering the course. Online and SBL courses could easily be accessed at the students' discretion, although timing and location of courses taught in an intensive mode would depend on geographical location and timetable to a larger extent. Students were encouraged to take as many or as few courses that best suited their needs. Coordinators of various degrees across the University were inquiring about 'sets' of courses that could be 'bundled' for other degree programs from other faculties at Central Queensland University. *The Virtual Conservatorium* was enthusiastic about these developments.

General population for award (full fee)

Central Queensland University had a successful distance education profile that allowed the general public to enroll in programs studying as a full time or part time student. This distinction would no longer be made for this category of student, as they would enroll in the same manner and mode as any other *Virtual student*.

General population for interest (no fee)

The online course materials from *The Virtual Conservatorium* were made freely available to any interested patron. There was no tutorial assistance provided nor would the conservatorium supply assessment for the audit of the course. It was hoped that this opportunity would lead to these students considering **studying** for the appropriate award in the future.

The technical elements

In order to serve the aforementioned, proposed student demographic certain technical changes to the delivery methods needed to be made. The traditional classroom-based lecture/tutorial mode of music education was only available to a limited number of on- campus students. In order to provide access to the wider population new delivery technologies needed to be explored on an ongoing basis. In addition to Face-to-Face (F2F) delivery other synchronous and asynchronous delivery services needed to be explored and developed. These services included methodologies such as Computer Aided Learning, Intensive Delivery, Online Delivery, PDF, VCD to name a few.

To accommodate these changes in delivery and simultaneously improve the financial efficiency of the on-campus and virtual environment, the undergraduate programs needed to be marginally modified. This process meant rationalizing the number of courses offered into a manageable number - raising, and subsequently introducing, the concepts of tri-annual and bi-annual offerings to the conservatorium stakeholders.

As well as the technical development of curriculum required, the rationalization of human resource strategies for the operation and management of *The Virtual Conservatorium* were, and remain, significant. This included the creation of a management and communication structure that was organic, rather than hierarchical, as well as a redesign of the approaches to academic and support staff that incorporates managing the learning process of the conservatorium students overall.

Delivery Styles and Formats

A range of delivery styles and mechanisms were utilised in the initiative. It was our belief that the variety of styles was fundamental to the support systems created. Students had ample opportunity to select from a range of modes in an effort to match their needs and preferences as learners. We considered a number of styles and formats to be incorporated.

Asynchronous delivery

By Asynchronous communications we meant the use of such things as E-mail and Online hosting that are not delivered in real time. Online courses gave students the option to study when, and for as long as they chose. As the demographic profile demonstrated there were currently two distinct markets for the undergraduate aspect of 'The Virtual Conservatorium'. The first market was the school leaver who chose this model of study given the flexibility of study options; the second market, older students who had not been successful in gaining entry into the major conservatoria in metropolitan areas and did not wish to relocate to Regional Centres such as Mackay and/or Rockhampton. Halsne and Gatta (2002: 1) highlighted this change in profile when they write -

'Today's college students are older, more diverse and display varying degrees of academic readiness. Many are well above traditional college age and due to various commitments, cannot relinquish their current jobs for the sake of education. Further some people are disadvantaged due to geographical remoteness or restricted by work schedule and need distance learning methods. Overall, distance learning provides learners with a more flexible way to further their education.'

Tertiary study was not purely the domain of post-secondary students. This second market group indicated included 'mature aged students' who generally were employed on a full-time basis and/or have family commitments precluding them from the conventional methods of conservatorium study, particularly if the option was not close to their current residence. This was a more diverse cohort and further increased the population base for which *The Virtual Conservatorium* was able to cater.

Synchronous delivery

The computer was also utilized in *The Virtual Conservatorium* as a synchronous delivery tool. By 'synchronous' we refer to real-time contact between parties, such as Video Conferencing, ISL (Integrated System-Wide Learning) and Chat programs such as 'IRC'.

Computer aided learning

CAL (Computer Aided Learning) involved the use of either commercially available software, or alternatively internally created software applications. CQCM used the term SBL (Software Based Learning). These programs contained all the instructional material required as well as drill exercises and, in some cases, examinations. Commercially available programs such as 'Auralia', developed and distributed by Rising Software, had been customised for CQCM in order to meet the course outline and profile requirements.

Intensive delivery

CQCM courses were based on credit point values that were multiples of three. Each three credit point value equated to 12 hours of contact lectures/workshops and subsequently a six - credit point course consisted of 24 contact hours. Traditionally this coverage had been achieved by means of weekly lectures of one/two hours per week over a 12-week semester. For some courses this weekly model was preferred, especially in relation to the development of skills in areas such as Chief Practical Study. For courses such as 'electives' this delivery method had proven impractical and even inappropriate. Rather than maintaining the one hour, 12-week semester delivery model - a number of courses using an intensive weekend design were piloted. A weekend model (Saturday and Sunday 10am to 1pm and 2pm to 5pm) was utilised. This delivery mode provided industry

current professionals with the opportunity to contract for these intensive two-day courses and students were therefore able to access quality professional staff from international and domestic music industry and related professional spheres. This contact with quality industry leaders had benefit for both students and staff. The mentor relationship with selected industry-based specialists was of enormous value for students because these personal encounters were often with those who would most likely be influential in them gaining future employment. The involvement of high calibre, short-term staffing enhanced the depth of staff quality and in turn provided professional development opportunities for current full-time staff. This change in mindset had also facilitated the timely and necessary rationalization of full-time staff located in Mackay and Rockhampton.

DOC, PPT and XLS - Microsoft Office Document file extensions

This was an elementary form of online text, data and electronic presentation delivery formats. It was only accessible by computers equipped with Microsoft Office. DOC was the extension placed after any Microsoft Word file when the file was created or saved to disc. Similarly PPT was the document extension placed after a Microsoft PowerPoint file and XLS was the extension for Microsoft Excel documents. Each of these Microsoft programs had an important specialization. Microsoft Word was primarily for the creation of text-based data; Microsoft Excel was most often used in the creation and manipulation of numerical and textual data in table format; Microsoft PowerPoint was a powerful presentation tool with the ability to link text and graphics in an animated format. The limitation of these file formats for use in virtual delivery was that although the files were dual platform (ie supported by both PC and Macintosh computers) they necessitated the prescriptive software of Microsoft Office to read the files. The Virtual Conservatorium had utilised .doc formats for

the electronic lodging of university documents such as course profiles, examination deferment and the like. The .xls had only been used for the electronic posting of statistical tables and .ppt for presentations that had been made on-campus that the virtual students had requested. In most cases, we had replaced these files with the more generically accessible PDF and MOV file formats.

.HTM (or HTML) files

In 1994 the World Wide Web (www) was commercially introduced. It should be noted that the development of the www was, as stated by Inglis, Ling and Joosten (1999) 'was in effect years earlier as the US Department of Defence set up ARPANet in 1969 to connect the military departments' (p. 64). With a standard for communication, http (HyperText Transfer Protocol) and a common standard language, html (HyperText Markup Language) all manufactured computers could communicate over great distances.

HTM was the appended file extension attached to internetbased graphical interfaces. Whilst programming with this was used on every website it was generally a programming skill that not all academics possessed. Due to this the files created for internet browsers such as Internet Explorer and Netscape Navigator were on the whole managed by web trained technicians not academic staff. Most academics were computer literate and wellversed in word-processing style skills and could therefore create and maintain materials in these Microsoft Office formats but not in HTML. For The Virtual Conservatorium we had decided to create the web portal and interface using .htm code but then linking to formats such as PDF, PPT, for example, so that the individual academic staff members could easily maintain and modify their projects. To activate changes they would email the amended file to the 'webmaster', who in turn uploaded the link in a matter of seconds.

PDF - Portable Document Format

Adobe Acrobat Reader allowed students the ability to view, navigate, and print documents in the Adobe Portable Document Format (PDF). These files contained text and images and due to the file compression available allowed for complex backgrounds and page-layouts to be downloaded economically. Although the creator of these files needed to access specific software to convert other file formats to PDF, such as 'Print to PDF' or the full version of Adobe Acrobat, the end user only needed the Acrobat Reader software, which could be freely downloaded from the Adobe Web site at http://www.adobe.com in Windows, Linux and Macintosh formats. In contrast with the Microsoft Office files which can only be read by a student if they had paid for the Microsoft Office software, PDF files could be accessed with the freeware 'Adobe Acrobat Reader. We had chosen this format for the majority of the text files within the lecture information for both the undergraduate and postgraduate students in The Virtual Conservatorium, as the file compression ratios allowed large amounts of stylized text and graphics in a relatively small file size and the freely available software for the students to access the data. Students had also commented that when they were using internet kiosks and cafes that did not have Microsoft Office loaded that they were not able to access The Virtual Conservatorium material unless it was in PDF format.

VAL - Video Aided Learning

VAL was a video-based distance education tool. On-campus lectures were recorded, duplicated and then made available to off-campus students. The video footage was generally unedited as it was a replication of any given lecture. There was no scope for the distance viewer to actively partake in class discussion or questioning. Student feedback indicated that whilst the relatively slow pace of a classroom-based lecture was tolerated

when present in the room, it was frustrating viewing the jokes, late starts and irrelevant questions that existed in a classroom environment. On a positive note - the VAL system had three advantages. Firstly, as it is asynchronous in nature the students could view it within their own timeframe. It could be started and stopped and easily repeated. Secondly, the class material/lecture could be reviewed as an examination preparation tool some months after the initial lecture had been given. And thirdly, as the VAL tapes were accumulated in a library location it was possible to view previous year's delivery of that subject matter and enabled the student to possibly get another lecturer's viewpoint. The Virtual Conservatorium adopted the VAL system purely as a backup of the delivery of intensive classes. In the case of a student missing the scheduled dates we had a backup video copy of the lecture available. This Audio-visual material was also beneficial, in edited segments, for the development of future virtual course materials.

ISL - Integrated System-wide Learning

Real time, online delivery could be treated in two formats — real time data and real time videoconferencing. Real time data transfer consisted of two-way typing communication protocols such as IRC and electronic Data boards. Type applications had an active window that the tutor and/or students keyed in. This information instantly appeared on the interface of all linked users. Similarly, data boards had the capacity to show type and simultaneous secondary applications such as "PowerPoint" presentations.

Videoconferencing was the simultaneous transmission of audio and video data. This could be from a desktop with a web cam, from a small ISDN device such as a "Swift Site" or from a large format IP/ISDN system such as ISL labs within CQU. All of these elements were used within the project.

SMS

The Short Message Service (SMS) was the ability to send and receive text messages to and from mobile telephones. The text could be a combination of words or numbers or an alphanumeric combination. SMS was incorporated into the Global System for Mobiles (GSM) as a digital mobile phone standard. A single short message could be up to 160 characters of text in length using default GSM alphabet coding.

CQCM had adopted this as one of the contemporary communication protocols between staff and students. From a desktop computer we were able to contact any GSM mobile phone and leave a short message. One of the requirements for admission into *The Virtual Conservatorium* was that the student had access to a mobile phone. Messages such as a bulk 'SMS-out' to all students enrolled in a particular course - advising them of a class cancellation due or assessment due dates - was common practice and worked effectively and efficiently.

Virtual Course Design and Applications

The restructuring of undergraduate course offerings

The undergraduate components of 'The Virtual Conservatorium initiative required a restructure of the on-campus offerings in an effort to ensure the project was viable from the outset. The Bachelor of Music/Performing Arts needed to be offered in the dual modes of on-campus internal and 'virtual'. Changes needed to be put in place whereby the identical program could be delivered in these two modes simultaneously. In the first instance this required a major rearrangement and reduction of course offerings to reduce the number of courses and increase overall class sizes. The creation of a 'foundation year' in which the academic courses were common between all three Mackay based courses — the Bachelor of Jazz Studies (Year 1), Bachelor of Music Theatre (Year 1), Bachelor of Music / Performing Arts (Year 1) was

viewed as useful. Courses such as 'Studies in Form', for example, were offered bi- annually, with second and third year students attending the same class. Given they were non-sequential and only required first year courses as a pre-requisite this did not create any problems or issues. The further impact of these changes provided considerable financial savings for the delivery of on-campus offerings as a by-product.

The restructuring of postgraduate course offerings

The Master of Arts Administration had been available in intensive delivery face to face mode in Sydney, Rockhampton and Melbourne for several years. The *MAA online* option meant that a fourth alternative would become available whereby five of the seven courses within the award would be available online. The conversion process had been taking place over a two-year period and the materials were ready for the formal launch of the project in July 2002. The essential ingredients of the initiative were the eAdministrator, eTutor and eCarer with a twelve-hour turnaround response time in all cases.

Online Application Lodgment

In the initial application for an audition to the undergraduate offering within The Virtual Conservatorium there was an electronically lodged form for students to complete located on the website conservatorium's front (see page http://www.cqu.edu.au/cqcm). This was trialed at the end of 2002 with enormous success and acceptance. A new version of this electronic form, specifically for The Virtual Conservatorium, was designed for implementation in 2003 for the 2004 intake. This online form replaced the existing paper application that had traditionally been used for CQCM program applications. An Adobe Acrobat PDF file was also linked as a companion guide to the online form.

Electives

Each year level of the undergraduate program — the Bachelor of Music/Performing Arts - had four electives that the students must undertake. In 1999 there were almost 100 courses available as electives with class sizes as small as one and two. This resulted in poor economies of scale and graduates from the program lacking scope from a musical viewpoint. It was decided that the function of the electives, within the Bachelor of Music/Performing Arts, should fulfill the function of adding a broad perspective to the student's musical perspective. Six subject areas were chosen, MIDI Applications; Studio Teaching; Arts Administration; Studio Recording Techniques; Composition; and Conducting. Each of these strands was considered with two courses associated. The notion of offering electives on a triennial rotation model had also been instigated. Only four electives were offered to Bachelor of Music/Performing Arts students each year over the three-year duration of the degree design. These electives were chosen to effectively and efficiently cover twelve varied extracurricular music items deemed essential. The Virtual Conservatorium did not completely dismiss the traditional teaching paradigm, but instead offered either further developments in course delivery or at the very least viable alternatives to the standard structure. The business strategies utilised were similar to those being incorporated into the current e-Commerce sector.

Communication and management structure of The Virtual Conservatorium

In contrast to the traditionally hierarchical structure of management that existed in tertiary environments, *The Virtual Conservatorium* was designed to operate in a more organic manner.

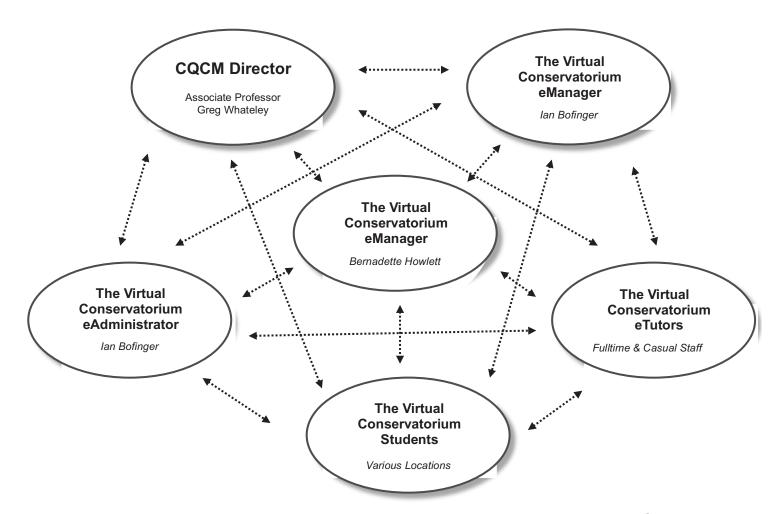


Diagram 2: Organic Management Approach

The Virtual Conservatorium had a commitment to care for both its students and staff. To achieve this an 'eCarer' was assigned to offer pastoral care to enrolled students and off-campus staff. The contact from the eCarer was usually of a supportive nature offering general news, gifts, merchandise, updates and the like as well as simultaneously enquiring about the student's academic progress and general well-being. This involvement might be a simple reminder that an assignment was due or a question about the student's/staff's academic well-being. The role of the eCarer was critical to the success and sustainability of The Virtual Conservatorium because it was the most tangible link to the non - academic university environment that a virtual student would make. Contact with the Conservatorium on a personal level would be particularly important when the challenges and pressures of university life became overwhelming or when personal anxieties arose about academic work, relationships, self-worth or identity. Confidentiality was always respected.

eAdministrator

One of the responsibilities of the eAdministrator was to ensure that the students were correctly enrolled and to give appropriate advice on related matters when needed. There was a 1800 number to the 'Help Desk' which was recommended for student use. The online reporting system 'PeopleSoft' contained all data pertaining to all Central Queensland University students. In the student interface 'eRolment' which could be accessed at http://www.e-ro1ment.cqu.edu.au all Central Queensland University students were able to enter course enrolments, view academic history and the like within this electronic environment.

Responsibilities of the eManager

The role of the eManager within *The Virtual Conservatorium* included ensuring that the correct academic processes were maintained by staff and students; contracting staff; and auditioning and allocating student places. This position was similar to the program co-ordinator role for on-campus programs.

eBachelor of Music/Performing Arts

Of the six programs offered by CQCM, two were identified as part of the pilot study (2002- 2003) for delivery within *The Virtual Conservatorium*. They were -

- Undergraduate the Bachelor of Music/Performing Arts (eBM/PA)
- Postgraduate the Master of Arts Administration (MAA online)

The Bachelor of Music/Performing Arts (as stated in the Central Queensland University handbook and website) covered a wide gamut of musical genres and had an inbuilt flexibility for development - 'The Bachelor of Music/Performing Arts was designed to provide specialist training in all aspects of classical, and/or contemporary performance, studio teaching and

composition. The title of the program was an indication of its versatility. Students were able to specialise in music whilst having the advantage of access to other art forms available on- campus. The resultant opportunity for creating individual combinations of these various art forms was a particular feature of the program.' (http://cqu.edu.au/cqcm)

In comparison to the two other programs offered at CQCM Mackay site (the Bachelor of Jazz Studies and the Bachelor of Music Theatre) the Bachelor of Music/Performing Arts provided greater versatility, for this virtual mode of operation, providing options for students to study either classical, contemporary, country and audio technology, or a mix of all four. This had made it the obvious undergraduate choice for the pilot program of The Virtual Conservatorium. The specificity of the Bachelor of Jazz Studies (Mackay), and extensive dance and acting components of the Bachelor of Music Theatre (Mackay) and the Bachelor of Performing Arts (Rockhampton) made them a difficult option for inclusion in the initial run of The Virtual Conservatorium initiative. These challenges would be considered in the future if the pilot program (eBM/PA) was successful and those other departments become willing to further participate in The Virtual Conservatorium glven the anticipated demand on greater flexibility and design by future students.

Creating the eBachelor of Music/Performing Arts was merely an adaptation of the existing degree placing the emphasis on the opportunity for students to access the program without having to reside full time on location in Mackay.Master of Arts Administration online

The Master of Arts Administration

The Master of Arts Administration (MAA online) was a seven-part program, with the seventh course weighted as a double course (12CP). Five of the seven courses were available online with an eTutor associated with each. All courses had

supporting text material, which was sent to students at the commencement of each course. Most courses also had an accompanying CD ROM, which provided an alternative to the written/printed resources.

A feature of the process was an interactive tutor that ensured a twelve-hour response to any and every question or query from students. This feature added to the interactivity of the site and was highly appreciated by graduate students. The two remaining components were delivered in intensive face-to-face weekend mode — and were available in Rockhampton, Sydney and Melbourne. The multiplicity of sites for these components had been noted as an appealing option given the students enrolled lived in three states and two territories.

The Virtual Conservatorium initiative arose from the need to extend the catchment area of the existing CQCM operation. Until mid-2002 students would travel to the various sites of delivery to complete both the Bachelor of Music/Performing Arts (Mackay) and the Master of Arts Administration (Rockhampton, Sydney and Melbourne). The development of the *eBachelor of Music/Performing Arts* and the *MAA online* has facilitated an enlargement of the catchment area for the awards and provided students with the opportunity of not having to relocate to a specific site for completion of the awards.

A range of new and innovative technologies were integrated into the delivery mechanisms of the awards, and the response from current students was positive. The MAA online commenced in July 2002 and the eBachelor of Music/performing Arts commenced in February 2003.

THE SOLUTION

This chapter is concerned with the processes and procedures involved in the creation and delivery of *The Virtual Conservato-rium*. We describe how and why we chose the actual design of the initiative; how these choices compare to other approaches; the specific tasks, both technically and pedagogically, involved; the difficulties encountered as well as the unexpected positive and negative outcomes that arose as a result of this process.

The approach selected and the reasons why

The idea of *The Virtual Conservatorium* arose in early 2000 as the institution (Central Queensland Conservatorium of Music) pondered its long-term future. It quickly became apparent that we needed to expand the catchment area of the operation by establishing multiple sites (in 1999 CQCM operated only in Mackay) and provide options for students who, for one reason or another, were unable to attend on-site options.

The virtual initiative began its formal life as 'Project iCon' (as reported in The Australian on March 12, 2001: 43). It was noted that our intention was to 'use a mix of electronic and intensive mode delivery methods, with software-based learning activities to meet the needs of students in multiple locations.' The project changed its name to The Virtual Conservatorium shortly

afterwards and CQCM subsequently now owns the business name and the website address –

www.thevirtualconservatorium.com

Willcocks and Sauer (2000, pp.101-102) proved a useful inspiration with their vision of the new organization in the new economy. They presented six conditions that needed to be embraced if we were to successfully reinvent ourselves and enhance our appeal and mode of operation. These conditions include high speed; responsiveness; reaching out globally and virtually; adopting new technology; internal collaboration; and integrating with partners.

Using these proposed conditions as a springboard - it was our intention to establish an electronic based, multi-modal operation that would allow students at both undergraduate and post-graduate level to access our resources and programs anytime, anywhere, and anyhow. Our project is about manipulating these key ingredients.

The importance of a high-speed operation

We recognized from the outset that speed was of prime importance. Gates (1999, p.xiv) reinforced the idea and gave it momentum when he wrote "If the 1980s were about quality and the 1990s were about re-engineering, then the 2000s will be about velocity." Our operation needed to be efficient, largely webbased and quick. To this end we utilized a range of delivery styles and formats including asynchronous delivery; synchronous delivery; computer aided learning; intensive delivery; DOC; PPT; XLS; HTM; PDF; Video Aided Learning; ISL (integrated System Wide Learning); and SMS. We instinctively recognized that a mix of current applications was essential in order to meet the varied and diverse needs of the students enrolled.

Undergraduate students were involved in a weekly face to face lesson with a chief practical study instructor at a location close to them. This allowed us to access industry professionals from all over Queensland who may not usually teach tertiary music due to professional commitments but have space in their schedules to teach one or two tertiary students only. It had become obvious that in some instances intensive two or threehour sessions better suited students who had to travel distances.

Postgraduate students completed five of the seven components of the program online with the assistance of an eAdministrator, an eTutor, and an eCarer. They were required to complete the remaining two components in intensive weekend mode at a choice of three locations Rockhampton, Sydney and/or Melbourne.

Students had access to materials on a 24/7 basis making acceleration through the program feasible. Our sites were fast and not weighed down with too much in the way of graphics and photographs so that students accessing via home modems were not disadvantaged.

Developing a high level of responsiveness

We recognized from the outset that it would be essential to have a high level of responsiveness not only in terms of access to resources but also in our responses to queries and questions from students spread across significant areas. We had some twenty-five undergraduate students spread across Queensland, with a further fifty places available over the next two years. In addition, we had postgraduate students spread across three states, two territories and three countries. The post graduate program had no limit on numbers, and we expected this to grow exponentially.

At the post graduate level, we had attempted to ensure a short response to queries and concerns. The eTutor made a commitment to a 12-hour turnaround period with the eAdministrator and eCarer committed to a 24 hour turn around each weekday. The feedback from students was positive and we appeared to be achieving our goals and at the same time satisfying their needs.

Reaching out globally and virtually

We believed that we needed to think globally, though working locally. Every aspect of the development had national and international implications in terms of the technology, resources, delivery mechanisms and applications. Our resources could be readily transferred to off-campus and off-shore sites. The program at both undergraduate and post graduate level was well suited to students with differing needs. Our catch cry of 'anytime, anywhere, and anyhow' seemed realistic and appeared to be working.

Adopting new technology

Growth in technological interest and computer literacy levels had evolved over the parevious twenty years to a point where most people now had some level of computer literacy and confidence. Whateley and Jankoff (2001, p40) noted that Generation X and younger students had grown up using the Internet: they may desire a different level of development. This issue needed to be carefully researched as the proportion of this group was increasing over time.' With this development of skills in mind it was also necessary to make allowances for the mature members of the student body without these developed skills.

Highlighting internal collaboration

A number of high calibre staff (eTutors) had been appointed to manage the delivery and assessment of each of the online and software-based courses. The staff for *The Virtual Conservatorium* had been drawn from the pool of full-time staff at CQCM and from industry specialists (mentors) outside the Conservatorium. The mentors were involved in a mix of delivery methods. These mentors, in a weekend/afterhours 'intensive' mode, taught some courses, while other mentors also delivered practical (CPS) lessons weekly in 'Face to Face' (F2F) mode. With the

addition of online courses offered by *The Virtual Conservatorium* some of these courses were also delivered and maintained by mentors.

An online administrator (eAdministrator) had been appointed internally to facilitate all aspects of enrolment, progress and result documentation. Central Queensland University installed an electronic enrolment university wide system (PeopleSoft) online during 2001 to replace the outmoded 'Jet' based system. This led to a more viable electronic administration of student data most useful for the initiative in question.

The third ingredient in the process was the appointment of an electronic pastoral carer (eCarer) who took responsibility for welfare and pastoral issues associated with the online student and/or off campus. The role, an internal appointment, incorporated weekly contact regarding progress, assistance required, and any other pressing issues that needed to be dealt with to enable the student to progress efficiently and with minimum stress. This was a key ingredient in the success formula.

Integrating with partners

There was evidence of useful outcomes supporting the notion of developing strategic alliances with like organizations locally, regionally, statewide, nationally and internationally. Alliances provided a range of opportunities and advantages including benchmarking. There was certainly nothing new about the notion of establishing alliances and networks. Powell (1990, p.298) provided an historical overview when he considered

'A long view of business history would suggest that firms with strictly defined boundaries and highly centralized operations are quite atypical. The history of modem commerce, whether told by Braudel, Polanyi, Pollard or Wallerestein, is a story of family businesses, guilds, cartels, and extended trading companies — all enterprises with loose and highly permeable boundaries.'

Kanter (1994, p.99) aptly described the dynamics of these alliances as 'like romances, alliances are built on hopes and dreams - what might happen if certain opportunities are pursued' and further 'perhaps the flexibility with the highest potential payoff involves the ability to combine a company's various resources in collaborative efforts: joint marketing between divisions, for example, or a product linking components from units that traditionally sold their wares separately, or the procurement staff for one business unit helping another find a supply source for a new venture.' (Kanter, 1989, p. 84)

It certainly made sense to develop co-operative ventures that achieved outcomes that would otherwise be extremely difficult to achieve individually.

Alliances and networks also provided a new enthusiasm for creating initiatives. Charan (1991, p.106) describes it well:

'Unlike most teams and task forces, networks do not merely solve problems that have been defined for them. Networks are dynamic; they take initiative. They become the vehicle to redirect the flows of information and decisions, the uses of power, and the sources of feedback within the hierarchy. They become a new way of doing business and a new operating mechanism for individual managers to make their presences felt.'

The energy and excitement that often results from co-operative ventures can play an important role in rejuvenating alliance members individually and collectively. Limerick, Cunnington and Crowther (1998) provided valuable insight into a platform for the development of strategic alliances:

'Some contemporary organizations already take very seriously the battle cry of 'fewer structural relationships' within their organization and have been moving towards broader networks of activity between units within their organizations. Significantly, they have also looked for synergies through loose coupling with units outside their organization. Some of them have deliberately franchised off parts of their businesses, or use subcontractors or strategic alliances with other organizations to gain a competitive edge.' (p. 55)

The Virtual Conservatorium initiative involved a number of key partners including Learning Network Queensland; The Australian Institute of Music; Cannon Hill Anglican College (Brisbane); Hamilton Island Enterprises; and Queensland Rail.

The meaning of 'virtual'

There had been numerous debates on the merits and appropriateness of the virtual teaching environment. It seemed, from the negative responses from those opposed to this methodology, that the debate had often begun before a thorough study of the possibilities of the virtual environment had even begun. We believed much of this negativity was a result of fear of new and confronting initiatives.

The word *virtual* did not preclude media other than the World Wide Web (www). In fact, the word virtual was synonymous with 'practical, essential, implicit, substantial, effective, implied and pragmatic.' (Microsoft Word Thesaurus, Soft-Art inc.) The virtual mode utilised a wide range of teaching procedures that disseminated subject information and enabled effective communication with the student. The context of virtual delivery was therefore practical (Face to Face, 'real world' based problem solving); essential (only the courses needed were taught rather than ensuring students were active in classes all day/all week); implicit; implied (eTutor contact 6 days/week, group discussion boards); substantial (academically rigorous and quality assured); effective (measured by course indicators

and evaluations); and pragmatic (ensuring graduates were multiskilled eMusicians).

According to Yeung (2001, p.1) Distance Education was the fastest growing sector of tertiary education in Australia at the time, indeed, in the last five years leading up to the initiative, the number of students choosing to study by distance education in Australia had grown almost three times faster than the number choosing traditional full-time on-campus studies.'

These statistics quoted by Yeung (2001) had an inbuilt bias, as the number of full- time, on-campus places had a capped quota, while distance education had a greater flexibility in the number of students in the intake. The multi-modal presentation format allowed the student the greatest access and choice as to the environment that most suited their lifestyle and learning style. Smith (2000, p.7) made the point that to retain customers, it is vital to focus on what people want and need rather than on what we want to sell to them.' Students who needed greater time to process information were ideally suited to Computer Assisted Learning (CAL) and online delivery as they could spend as much time directly interfacing with the tutoring media as they required. Similarly, a student who needed less time on a particular course could choose to complete the coursework at a faster pace and employ their time elsewhere in their studies.

On of the most attractive aspects of this third level was that students from interstate or overseas would be able to complete entire awards without having to leave home. McCormack (1994, p.126) alluded to the possibility that success overseas brings success locally. 'Remember, no top executive is ever happy with his company's international operations. Do something for his company internationally and it will open the door for domestic opportunities as well.' This had certain financial and career implications for a range of potential students who were able to remain in their current work situation, and at the same time,

become involved in undergraduate and/or post-graduate studies off-campus or off-shore. In terms of benefits to the provider, the perception from the immediate local market was one of higher standing and esteem.

The Virtual Conservatorium provided students with the opportunity to complete an undergraduate Bachelor of Music/Performing Arts and/or a Master of Arts Administration in a multimodal, virtual environment utilizing all of the aforementioned virtual modes. Most courses offered within *The Virtual Conservatorium* were delivered in a variety of modes to suit the students' learning requirements. Collis (1998, p.9) observed customer satisfaction is directly related to business success. He noted 'Customers are driven by their wants and needs. If your business has what they want, at the right time and price, they will usually do business with you.' It is our contention that we have developed a product that will suit an existing market.

Precursors to virtual studies at CQCM

In early 2001, *Project iCon* was devised to address the issues noted and other contentions by creating greater options and flexibility for study. In many ways this was *The Virtual Conservatorium* platform not yet fully developed or fully thought through. At the time, four key environments were identified to assist the rethink of undergraduate offerings and delivery, including the use of the *internet* as a delivery and information source; the use of *intensive* delivery mechanisms; the incorporation of *industry* mentors and ongoing *innovation* and design.

Although each of these elements may not have been 'revolutionary breakthroughs' in terms of educational strategy, in the Australian context, placing them simultaneously in a conservatorium environment was unique to CQCM and a radical move in the traditional conservatorium environment.

Each of the four categories noted utilized some or all of the following pedagogies - innovative and interactive on-line delivery; intense periods of study; industry recognised lecturers; synchronous communication; asynchronous communication; stylised print material of commercial quality; CD ROM and VCD self-contained learning packages; and Computer Aided Learning (CAL) / Software Based Learning (SBL).

Innovative and Interactive online delivery

The use of the Internet in the iCon' project (the precursor of *The Virtual Conservatorium*) were threefold: first, as an asynchronous device; second as a synchronous delivery medium; and third incorporating the use of software- controlled' training packages. Online studies are commonly of an asynchronous nature. The delivery and feedback were not given in real time, but rather in a non-time specific format. The lecture was generally located on a server and accessed by the student to study at a convenient time. Questions (and other feedback relating to the course material) were lodged by sending e-mail to the eTutor.

Synchronous lectures within Central Queensland University were mostly given using ISL (Integrated System-wide Learning) technology. This was only possible if both the lecturer and the students had access to an ISL theatre. Having a staff member teaching remotely from a desktop computer to a class had proven to be a little more difficult. A number of software applications were trialed (*CUSeeMe*, *White Pine*, and i*Visit*) until a suitable H323 video protocol application was found (*VideoLink Pro* — Smith Micro). This software created three possible teaching mode opportunities. As the protocol was the same as the ISL standard, a remotely located staff member could create a real-time audiovisual link with an ISL laboratory; communication could be made from desktop to desktop; and a lecturer could make real time audiovisual contact with a single student or group of students from an ISL equipped room.

With this technology in place the practical component of a cohort of composition major students had been maintained at CQCM. With access to a specialist lecturer located in Brisbane, the composition students benefited from this technology. CQCM referred to this as *Composition Online*'. A mix of methodologies was used to enhance the effectiveness of video streaming such as scanning and emailing handwritten documents into PDF format, electronic software applications to notate and create MIDI data files, and short-term intensive face - to - face (F2F) contact.

A new term SBL (Software Based Learning) referred to the use of commercial software teaching packages for initial training and testing. The term CAL (Computer Aided Learning) generally referred to education dissemination only. This mechanism allowed for different rates of learning amongst students and created greater access time for students to pose questions and enter into informed academic debate with the appointed lecturer. The adaptation of *Rising Software's 'Auralia'* had been used for the effective offering of Musicianship 1 — 8 at CQCM.

New models in distance education, and in particular online course work, were becoming a common practice in the university environment. As it becomes a more integral part of tertiary education the question constantly to be asked was - 'is it in fact better, worse or as good as traditional education?' There had been countless debates about the two distinct trends currently highlighted in the contemporary literature for higher education in music education - Face to face (F2F) / Synchronous and Asynchronous Learning Networks (ALN).

The Virtual Conservatorium combined the elements of F2F/synchronous learning such as the tactile nature of F2F and the real-time personal mentor relationship that could be developed, and the anywhere, anytime and anyone elements of ALN in a manner unique to CQCM. The delivery of the undergraduate degree fell into two distinct categorical models. For the bulk of

the academic delivery the on-campus Bachelor of Music/Performing Arts used standard lecture/tutorial techniques whilst the practical courses were delivered F2F in either individual or ensemble sessions.

It was proposed that the academic courses associated with the BM/PA should be translated into *The Virtual Conservatorium* mode of delivery as primarily ALN methodologies for courses taught by off-campus staff with regular email contact and group, online chat (eg. IRC) when required. The BM/PA on-campus students in turn had the same courses delivered by synchronous F2F tutorials working in conjunction with the online material when being taught by full-time CQCM staff.

The practical component of *The Virtual Conservatorium* model as an off-campus activity utilized the same principles as the on-campus model but with the physical location being elsewhere and the relevant staff member being employed on a casual/part-time basis. Preliminary approaches to possible staffing candidates had been met favourably. Many industry professionals who were not willing to commit to a full-time teaching appointment seemed prepared to commit to a l or 2-hour weekly arrangement. This translated into the real possibility of enriching the quality of CQCM's teaching pool with the addition of these non-full-time, high-end employees.

With regard to the financial issues, Inglis, Ling and Joosten (2000) postulated that digital education (ALNs, eLearning environments) was heavy on the development costs, but lighter in delivery costs. On the other hand, traditional F2F is light on development costs and heavy on delivery costs. These factors needed to be calculated in determining the financial viability of either method in the long term.

Face to Face as a delivery mechanism

Face to face (F2F) represented the traditional approach to subject delivery. This usually involved a regular weekly lecture

and tutorials with staff and students present in the same physical location. With the ever-increasing amount of information that students were required to process, the shift from a lecture mode of dispensing knowledge to that of knowledge creation was logical and appropriate. Ocker and Yaverbaum (1999, p.428) commented on traditional delivery models 'with the traditional lecture model of instruction, instructors dominate classroom activity and only a small portion of classes elicit student interaction.'

The requirements for the student as a 'life-long learner' were the skills of synthesising, analysing and integrating material rather than reciting the material. In the nineteenth century European university environment this was achieved by a focus on the 'tutorial' process with an academic mentor in an informal manner. The 'lecture' was achieved by these students accessing set research readings or sessions given by one of the postgraduate students. The dissemination of the information was a secondary priority to that of the rationalisation, synthesis and reasoning of the information. The trend at the time of lecture and tutorial roles in Australian Universities mimicked that of the American tradition of the tutorial being a secondary lecture and assessment instrument for the earlier lecture. In many arts degrees this aspect of learning was achieved in the assessment of a research project or essay, with this assignment done outside the face-toface delivery timeslot and usually in a separate physical location.

Learning by 'being told', learning 'by doing', learning by 'reading and searching the literature', learning by 'discussion and debate' were pedagogical constructs used in tertiary degrees and in different ways in different disciplines and to varying degrees. Bourne, McMaster, Rieger, and Campbell (1997, p.4) noted:

'It is common practice in undergraduate education to have lectures two or three times a week and a laboratory or discussion period only once per week. In a typical lecture given in engineering education, there is little discussion. In the laboratory, students learn by doing experiments. Engineering students will almost always express the sentiment that they learn much more in laboratories than in lectures.'

The Virtual Conservatorium aimed to identify and act upon this discrepancy by increasing the focus on communication and debate whilst reducing the intellectual capital tied up in the delivery of the information. As lecture class sizes had now increased significantly in key areas (up to 500+ students) universities were utilizing the skills of their most senior academics to deliver the information in lectures, with junior academics instructing the tutorials. This meant a dilution of face-to-face delivery benefits and quality.

Synchronous, non F2F lectures within Central Queensland University were mostly given using ISL (Integrated Systemwide Learning) technology. This was only possible if both the lecturer and the students had access to an ISL theatre/s. Having a staff member teaching remotely from a desktop computer to a class was possible. The ISL system worked in three possible teaching modes. As the protocol was the same as the ISL standard, a remotely located staff member could create a real-time audio - visual link with an ISL laboratory; communication could be made from desktop to desktop; and a lecturer could make real time audio - visual contact with a single or group of students from an ISL equipped room.

Tucker (2001) noted that the ardent advocates of online education were critical of their traditional counterparts viewing the F2F delivery as 'unchangeable, inflexible, teacher- centred and static'. (p.1) In their comparison of F2F versus ALN student satisfaction outcomes the survey results provided by Ocker and Yaverbaum (1999, p. 436) were informative. In the areas of 'learning quality' and student 'content satisfaction' F2F surveyed

equal to ALN. In the criteria 'process satisfaction' and 'perceived discussion quality' F2F rated higher than ALN. Only in 'solution satisfaction' did ALN rate more highly than F2F. The implications of these findings for *The Virtual Conservatorium* were that there would need to be some reconsideration of the processes used and discussion methodologies incorporated.

Fallah and Ubell (2000) provided a 'blind' comparative study of the effectiveness of online delivery when compared with oncampus study. Their findings confirmed results from previous research demonstrating that there is little or no difference in student outcomes when online learning is compared with on-campus classroom experiences. An important observation was that it appeared to take a certain level of maturity to sustain a commitment to self-motivated study in an online environment as compared to F2F delivery models.

Tucker (2001) indicated that students learn far too little when the teacher's personal presence is not available. This narrow viewpoint questioned whether the subject material, if not taught F2F, is of sufficient quality to merit a university degree. Tucker then questioned whether studying, using any other teaching methodology apart from F2F, is better than receiving no education at all.

The Virtual Conservatorium incorporated F2F in the delivery of Chief Practical Study (practical lessons), ensemble courses and intensive delivery courses in an effort to ensure that students did receive quality support. The Virtual Conservatorium maintained F2F as a key component of its operation.

The creation of asynchronous online materials

We considered courses that required a complete restructure or initial creation and agreed these should generally be outsourced. The courses that were to be taught by on-campus staff or those that required little modification could be done 'inhouse'. The asynchronous materials needed a sound educational basis. The Virtual Conservatorium materials were beta-tested (secondary form of public appraisal) on on-campus as well as virtual students to evaluate their relative merits and it was considered essential that regular updating become part of an on-going process.

The material required for the online course was, and continued to be, created by staff within the conservatorium environment. This material creation was done by full-time on-campus staff or out-sourced to selected eTutors. Welch (2001) supported the notion of outsourcing to ensure quality outcomes when he states —

'Back rooms by definition, will never be able to attract *your best*. We converted ours into someone else's front room and insisted on getting *their best*. That worked for us so many times. This is what outsourcing is all about. It's also what many lay-offs were about in the early 1980s as these jobs migrated elsewhere.' (p. 397)

Delivery using Synchronous online formats

Real time online delivery could be treated in two formats — real time data and real time videoconferencing. Real time data transfer consisted of two-way typing communication protocols such as IRC and electronic Data boards. *Type* applications had an active window that the tutor and/or students typed using a keyboard. This information instantly appeared on the interface of all linked users. Similarly, data boards had the capacity to show type but also, by utilising a drawing tablet, could transmit handwritten diagrams and simultaneous secondary applications such as 'PowerPoint' presentations. Videoconferencing was the simultaneous transmission of audio and video data. This could be from a desktop with a web cam, from a small ISDN device such

as a 'Swift Site' or from a large format IP/ISDN system such as ISL labs within Central Queensland University.

SMS (Short Message Service) was also used to communicate with students who owned mobile telephones. This further enhanced the efficiency of information communication and information dissemination. Mickelthwait and Wooldridge (2000) had highlighted 'A decade ago there were only around 10 million mobile phones. By 2004, there should be a billion of them, exceeding the number of wired phones. The next few years will see the matings (sic) of three devices — mobile telephones, computers and personal organizers.' (p. 40) There is clear evidence of this in 2003.

Software based learning centres

The use of computers as teaching aids had been gaining acceptance within teaching institutions over the past twenty years. In the early 1980's there was a considerable amount of software written for the Apple 2e and the 2GS, especially for education studies. At the same time Queensland tertiary institutions, such as Queensland University of Technology, were using computer-modeling technologies to train students in areas such as Chemistry and Engineering. These applications simulated environments that students would not normally experience. Simulations included scenarios of a dangerous nature, too hazardous to actually complete in laboratory conditions. In this context, software applications were used to enhance the academic delivery of a standard lecture mode course.

During the 1990's, as internet speeds increased and broadband networks became available, online subjects gained popularity. These courses had provided an alternative to print material as a distance education tool. The multimedia aspect of the Internet not only allowed the delivery of text and pictures but also video footage, audio and embedded application support. Hong, Lai and Holton (2001, p.1) commented on the emergence of web-based learning basics –

'Schools from elementary levels to universities are using the Web and Internet to supplement classroom instruction, to give learners the ability to connect to information (instructional and other resources) and to deliver learning experiences. The Internet is recognising our approaches to education and altering communications in society, affecting our educational system.'

Complete replacement of the standard lecture by this method had generally been limited to postgraduate offerings but as undergraduate computer literacy skills develop, this method was becoming a viable option.

Software Based Learning (SBL) used specifically designed applications to deliver the course material. As with online delivery this mode allowed the student to work at their own pace and timeframe and utilized staff time for debate/questions with the student body rather than just the dissemination of information. These programs differed slightly from the standard online delivery in that the software was developed to not only train, but also drill and test. The Australian program 'Auralia' had been slightly modified to fit within the current Musicianship 1-8 courses. All indicators suggested that it worked effectively. The SBL laboratories also contained other software used for intensive course offering. Although the laboratories were connected to the university's ethernet system, it was decided to keep the SBL computers as stand-alone devices. This disabled the computer's potential distractions of personal student email and 'net surfing' capacities during the class.

There was a generous amount of software specifically created for music education. Sites such as CTI Music (www.lancs.ac.uk/users'lrusic'research/sv•.me.html) listed 33

applications for Aural Training alone. When evaluating software - considerations were made with regard to platforms; level and clarity of training; demonstration copy availability; price; and country of origin. Preference was given to software that was available on both Mac/PC platforms; fitted our course requirements; offered a site license; and was Australian made. To suit the needs of Musicianship 1 — 8 the program *Auralia*' by 'Rising-Soft' was specifically chosen to achieve the greatest integration and equity for students. The CAL materials were also the primary delivery modes for on-campus students as well as virtual students.

The approach compared to other approaches

Making comparisons between the proposed *Virtual Conservatorium* and other existing systems of on-campus and distance education allowed us to identify areas of innovation rather than duplication. We addressed the issues and notion of access versus quality. We considered whether the advantages of off-campus virtual study outweighed the benefits of on-campus traditional delivery pedagogies. We also considered how they truly differ. We further identified and compared the program to other distance education systems, online courses and ALNs. To assist with this comparison, we also dealt with student learning styles and a comparison between the 1999 and 2003 on- campus delivery of the Bachelor of Music/Performing Arts program as a basis for the discussion.

The notion of access versus quality

'Our tertiary institutions are paralysed by a state of churlish inertia' according to Sheehan (2001. p.6). Further, Australia is 'dumbing down' or losing ground to other economies moving more aggressively into the Information Age. Sheehan (2001) questioned whether the 'Australian tertiary education

revolution of the past decade, which saw an explosion in the number of universities and university graduates, has also been accompanied by an explosion of mediocrity.' (p. 6)

Killian (1997. p.3) argued that if online teaching isn't better than F2F then there is little justification in going online at all. The paper further questioned whether online delivery was just giving the homebound student, the rural student and the workplace student a 'pallid imitation of a real education'. Allport (2001. p. 21), however, raised the access issues of 'e-education' commenting that it enhanced the participation of disadvantaged groups. His debate identified future implications for the wider university environment in relation to the balance between scholarly education and research, the latter having implications on the knowledge base that was created and nurtured within the universities. Killian (1997) comments on the concern that illprepared entry into the online market could be disastrous for the future of e- education. 'Serves us right if our offline colleagues begin to think that online learning is really glamorous and jump off into the deep end only to get into trouble. We owe them better council: the ultimate payoff is too big to risk' (p.4)

Hiltz, Zhang and Turoff (2001) claimed that ALN tends to be 'as effective, or more effective, than traditional modes of course delivery' but further argued that studies regarding the quality of the distance model are superfluous and the research on ALN should be focused on how to make it more effective especially as technologies advance. In contrast Fitzpatrick (2001) highlighted his concern regarding the efficacy of online education being inconclusive. He further reported that enthusiasm for the new paradigm of shifting focus to the learner, rather than the teacher, was seen as one of the perceived advantages and in turn, making learning a goal rather than a by-product of education. The statistics forwarded by the National Centre for Educational Statistics, US Department for Education, Office of Educational Research and Improvement supported the view distance

education was just as effective as traditional education with regards to learner outcome. Killian (1999) pointed out the shift to online was driven by the novelty factor and the extension of classroom teaching motivated by other issues. As with the comments made by Fitzpatrick (2001), Killian (1999,p.2) noted that the role of the educator was changing, comparing the challenges facing on line tutors as 'almost like going through adolescence again: the changes are exhilarating but frightening, and we feel torn between the desire to try out new powers and the fear that we'll foolishly waste or misuse them... or find out we don't really have them after all.'

Goodwin, Graham and Scarborough (2001, p.12) noted that 'student learning outcomes can be enhanced by eLearning if there was a pedagogical strategy that incorporates 'collaborative learning, adequately rewards effort and is appropriately resourced.' Any successful implementation would need to embrace considerable commitment by both the institution and the staff involved.

Quality can be measured in terms of the credibility of the university; specific program; faculty profile; process development; platform design; and leadership mechanisms. Rahmann (2001, p.8) argued that these five areas constitute the fundamental design on which credibility must be established. This level of credibility would influence the quality of both staff and students attracted by a given University. The improvement in the standard of student intake and faculty would ultimately influence the quality of the program. This constitutes the cycle of continuous improvement.

Rahmann (2001) also suggested that for successful online delivery quality could be maintained by regular course audits and evaluations; sharing of best practices; seeking criticism and feedback; and remaining informed of new initiatives. Yeung (2002) reported that quality was the key to all education whether it is traditional F2F or more open and distance learning designs. To ensure quality in an online program, therefore, an 'integrated, systematic and holistic approach' (p.1) must be introduced and integrated. Observable examples of quality provision would be the inclusion of support and library services; online resources for inquiry; suitable counseling; registration, payment and assessment; and the availability of online learning resources. Yeung (2002) also noted that issues such as Quality Assurance and Performance Standards must also be addressed and are fundamental to long term success.

Hong, Lai and Holton (2001) discussed the positive developments of eLearning. From the instructor's perspective, Hong et al indicated that the process enriched their own learning experience as the constraints of time and space were removed to allow for deeper and more diverse discussions than those raised in a traditional F2F classroom model.

Rahmann (2001) identified concerns expressed by staff about online education. These concerns included philosophical objections such as 'online quality is not satisfactory'. (p.5) The blanket statement of unsatisfactory quality can be only justified when examining online projects that have not been exhaustively planned and developed. If virtual learning is correctly adopted into a learning environment - then it was our view that the quality could only be enhanced and defended.

Distance education as a delivery mechanism

The most common external studies system of distance education involved the university sending a mail package of physical data to the student. Course materials such as study notes, textbooks, audiocassettes and videotapes took the place of oncampus lectures. Study notes were either a compilation of selected readings, subject outline, study guide or laboratory manuals depending on the nature and design of the course. A more recent development was the addition of CD-ROMs and

computer disks. Support and communication was maintained between lecturers and students by telephone tutorials.

In 1994 the World Wide Web (www) was commercially introduced. It should be noted that the concept of the www was, as stated by Inglis, Ling and Joosten (2000) introduced years earlier by the US Department of Defence set up ARPANet in 1969 to connect the military departments. With a standard for communication http (HyperText Transfer Protocol) and a common standard language html (HyperText Mark-up Language) all manufactured computers were able to communicate over great distances. Levine, Locke, Searls and Weinberger (2000) summarised well in saying –

'The Internet became a place where people could talk to other people without constraint. Without filters or censors or official sanction - and perhaps most significantly without advertising. Another non-commercial culture began forming across this out-of-way collection of computer networks. Long before graphical user interfaces made the scene, the scene was populated by plain old boring ASCII: green phosphor text scrolling up screens at the glacial pace offered by early modems.' (p.4)

Certainly times had changed - and the technology had improved considerably - but the essential premise of communication remained at the core of the development.

Developing Online Courses

Our online courses were created and located on servers within the university's domain. Students received an email notifying them of the www location. Students registered on site and gained electronic access to all of the material that would have been previously mailed to them. Communication could be then

made with the lecturer (eTutor) and other students, for that matter, using email. This method of delivery allowed more flexibility for students because it enabled them to also access the administrative and support services of the University, such as the Library, Bookshop, Student Services and student records available electronically.

As computational powers improved and data storage increased this mode had facilitated teaching in a more interactive manner accompanied by developments such as embedded audio, MPEG video and multiple site links. The developments in technology made this delivery method even more exciting and enjoyable 'Our eyes are being opened to extraordinary possibilities in the provision of education through the ever-expanding technological advance...New learning technologies must be eagerly embraced to cater for a far more diverse and discriminating student body.' (Higher Education Review, 1997. p. vii)

The creation of an ALN based system for *The Virtual Conservatorium*

Asynchronous Learning Networks (ALNs) were often promoted as being for anyone, anytime and anywhere. ALN combined self-study with substantial, prompt, asynchronous interactivity with others. In an ALN environment learners used computer and communications technologies to work with remote learning resources including coaches and other learners in a non-real-time manner. The most common ALN communication tool was the World Wide Web, using online materials and email text communication.

Using this definition, distance education based primarily on a synchronous audio or video presentation or conference was not ALN because these constantly require learners and instructors to be available at the same time. A videotaped course or mail based correspondence course or computer-based training did not qualify as ALN because these did not include substantial and

rapid interactivity with others, even though the learner might mail in a paper or test and receive a reply days later. The primary use of computers for ALN involved the use of computer conferencing for the submission of coursework, discussion of issues between students, and for technical and academic help.

Catering for differing Learning Styles

Tucker (2001) conducted some initial field tests to determine the comparative efficiencies of both F2F and ALN teaching. With the same tutor delivering the same course to both groups, he found no appreciable differences between pre-test scores, homework grades, research paper results and final course marks. There were, however, differences in ages, post-test scores and final exam results. The online students were generally older and scored higher in each of the latter categories. Tucker (2001) further noted that these results were inconclusive in proving the superiority of online over F2F as other factors may have contributed to the study's results.

In an attempt to summarise learner styles, Tucker (2001) noted that distance students preferred working with people with 'direct experience' (such as our notion of Industry Mentors) whereby they had direct contact with materials, topics or situations. They responded poorly to authority and listening to tapes, lectures or speeches. The traditional student responded best to inanimate and iconic stimuli and preferred such things as interpreting movies, slides and images. They responded poorly to independence and reading. Tucker (2001) concluded that distance education suits certain learning styles that preferred Direct Experience, and the structure of the course allowed for considerable hands-on experience in learning course content. They least preferred authority, and the structure of the course allowed them the freedom to work independently on course material.' (p. 7)

A Comparison between the 1999 and 2003 delivery statistics on the Bachelor of Music/Performing Arts program

The comparative delivery contact hours between 1999 and 2003 had been almost halved (756 hours down to 348 hours) due to the restructuring of course offerings. This had a financial impact. As class sizes had increased the delivery cost per student had become more cost effective. Class sizes of 2 and 3 were common in 1999, this was not the case in 2003.

THE SPECIFIC TAKS INLCUDED IN THE APPROACH

In this chapter we identify the areas and approaches taken to make the transition from a traditional classroom teaching system to a virtual learning environment. These changes include the redesign of the tools and methodologies used; design and delivery of *The Virtual Conservatorium*, the new teaching, evaluation and assessment considerations; communication and monitoring of students' progress; and financial and administrative management of the process.

The Operating Environment

As a development and extension of traditional tertiary music delivery *The Virtual Conservatorium* has designed and created learning paradigms for the courses that were offered using some or all of the following -

- Innovative and Interactive Online delivery
- Intense periods of study (weekends, after hours)
- Industry recognized lecturers
- Synchronous communication (video conferencing)
- Asynchronous communication (video, email)
- Stylised print material (commercial quality)

- CD self-contained learning packages (similar to online course material for students not on-line)
- CAL ('Computer Aided Learning' where the software teaches, trains and also examines the students as required. Staff can then be accessed via e-mail tutorials/video conferencing)
- SMS (Short Message Service) using text messages for student contact.

Intensive

In examining the face-to-face offerings made at CQCM it was noted that most three credit point courses (3CP) had a contact time of one hour per week and that those with a six-credit point (6CP) weighting were usually taught for two hours per week. With Autumn and Winter semesters being twelve weeks long - it equates to each 3CP course having a contact time of 12 hours and each 6CP course having a contact time of 24 hours.

By utilizing Saturday and Sunday (10am — lpm and 2pm — 5pm) options became available for a complete three-unit point subject can be delivered on one single weekend. This design made it viable to engage a specialist lecturer if there was no suitable full-time staff member available to teach the course. This inclusion of 'celebrity status' lecturers ultimately enhanced the profile of CQCM. Similarly, over a four-day week of teaching (10am — lpm) the contact time requirement was suitably satisfied giving the intensive delivery shape some added flexibility. This allowed students, particularly at regional university centres, access to a range of quality industry professionals that they might not otherwise encounter. It was important to note that delivering twelve hours of lectures in two days requires a high level of preparation and time management. It was observed, at CQCM, that staff teaching in this intensive format tend to have better structured A/V material, study guides and associated resources. They also appeared to disseminate more information to the students.

A sample student timetable highlighted that many hours appear to be wasted in the standard model of delivery as a result of non-sequential time tabling of courses. There were often gaps of 2 or 3 hours between course offerings on a given day. By simply offering one or two courses in an intense block period, rather than as a weekly commitment, the practice freed up profitable time for the student to allocate considerable time to other areas of focus.

Time management had become very important - and time wastage had become less acceptable in today's marketplace. Helgensen (2001, p.28) argues the case well –

'Today priority is given in every possible setting to people who are working. Hotels advertise the number of ports and phone links available in each room, the personal fax machines, the broadband lines that will connect us to the internet. Vacation retreats draw us because of their remote location and promise of privacy nevertheless offer business centres and conference rooms so we can keep working while getting away from it all. Planes and trains provide in-seat phones and plugs for our PCs, so we don't need to waste a single moment.'

The expectation of staff was that students would dedicate at least three hours daily to the development of their chosen practical major. By reducing the regular contact load per week for non-practical units and courses this provided the student with the opportunity to focus on their chosen major field of study.

Industry

The Virtual Conservatorium required fewer full-time staff than other traditional conservatoria models. CQCM Mackay, for example, changed the 1989 ratio of full-time staff to students from l6 fulltime staff and 23 students (1:1.4) to 10 fulltime staff and 108 students (1:10.8) in 2002. The Rockhampton figures were 3

full-time staff and 63 full-time students (1:21). These figures related only to the undergraduate performing arts degrees at Mackay and Rockhampton sites.

Full-time staff had the primary function of managing the instructional process and a secondary focus of being directly involved in its delivery. The shortfall created by the reduced number of full-time staff was addressed by utilising the expertise of industry relevant sessional staff to deliver the majority of the course material. Sessional staff acted as Industry Mentors and were located throughout Australia and accesed students in a variety of ways including intensive face-to-face, video conferencing, teleconferencing and email. The emphasis had been placed on employing high profile industry mentors who enhanced the profile and reputation of CQCM. Jennings and Haughton (2000) reminded us that if the managers of CQCM only employ staff of lesser stature than themselves then future growth was limited 'If we hire people smaller than ourselves, we'll become a company of midgets, but if we hire people bigger than we are we'll become a company of giants. '(p. 180)

The further potential of this interaction between students and industry was post- graduation when students were seeking employment within the music industry. It has already been demonstrated by students auditioning for employment that this contact was invaluable and gave CQCM graduates an edge when applying for these positions.

Innovation

The utilisation of a three semester (term) model - each consisting of 12 weeks allowed for a second 'mid-year' intake into the first year of the course. For some students the ability to fast track their degrees had become available by using the third semester as a repeat semester to rectify their course program due to absence or failure. Turoff (1997, p.21) supported the conservatorium's decision —

'Ultimately a three-semester system for Institutions of higher learning would be an extremely desirable situation for distance courses... On the other hand the four-quarter system probably leads to a too compressed time scale for asynchronous communication-oriented courses.'

This set-up also made possible the delivery of other institutional products on a subcontract basis. Students could cross-enroll from other universities or from faculties within the university, for credit against their nominated program.

The limitation of the number of subjects offered every year has been achieved by selecting 12 'electives' on a triennial rotation (4 offerings each year); the design of 'foundation' courses for all first-year students; and the biannual rotation of second and third year musicology subjects. This increased class sizes across the operation making the design financially viable.

Project Uptech

In our earliest deliberations about *The Virtual Conservatorium* it was felt that the medium into which this concept should be primarily embedded should be the Internet with a particular focus on Online offerings. As *The Virtual Conservatorium* concept evolved to include other pedagogical methodologies the technological requirements remained of the highest priority.

This early technology development phase was succinctly titled 'Project Uptech' and involved an initial investment of approximately \$65,000. Further versions of 'Uptech' continued to develop the physical framework upon which to springboard The Virtual Conservatorium. The initial outlay centred on the areas of staff resources; the establishment of a software-based learning centre; a multimedia studio; a recording studio; and an internal communication system.

Computer Upgrades

For staff to keep abreast of the changing technological demands of the emerging teaching environment two important needs had to be satisfied. First, there needed to be a standard operating environment across the conservatorium. Second, computers had to be industry-current and able to remain viable for at least a two-year period. As Moore predicted, the processing power (of computers) doubles every two years and the economic lifespan of a computer must fall within this timeframe. Bostrom (2000, p.11) summaries the notion well –

'Moore's law states that processor speed doubles every eighteen months. The doubling time used to be two years, but that changed about fifteen years ago. The recent most data points indicate a doubling time as short as twelve months. This would mean that there will be a thousand-fold increase in computational power in ten years'

Macintosh was, and remains, an industry standard in musical education because the operating platform ideally suits desktop applications. The iMac was chosen to remain as the standard hardware device for the conservatorium. This decision was influenced by statements made on the URL http://www.ap-ple.com.au, such as -

'If you're an accountant, you're most likely surrounded by beige Wintel boxes. But if you work in nearly every creative field, you most likely use a Mac. Like in graphic arts, advertising and publishing. Or in Hollywood. Or in Australian education, where Apple is the number 1 brand. Or if you are President of the United States (the two most recent presidents both use Macs.) In all, over 25 million people in the world use Macs in their homes, offices and schools every day.'

In 1991 CQCM had three computers. Two of these were Macintosh and one was a DOS based PC. Communication between these were virtually nonexistent. Throughout the following years, computers were passed on to staff as the Director and administration staff upgraded. Although some of the computers were nearly ten years old the original Macintosh computers were still functional, although they executed the applications very slowly. The windows-based PCs, on the other hand, were no longer able to execute the software. In 1999, for the first time, the staff at CQCM each were allocated a computer on their own desk. These were Macintosh PowerPCs of varying degrees of computational power surplus to the larger Faculty's requirements. Hamel and Prahalad (1996, p.66) argued that revising both financial and intellectual capital is necessary to forge a meaningful future —

'To get to the future, a company must be willing to jettison, at least in part, its past. Someone once remarked that 'God created the world in six days, but He didn't have an installed base.' But what prevents most companies from creating the future is not an installed base of obsolete capital ... but an installed base of thinking.'

During 2000 iMacs were purchased for <u>all</u> staff members raising the stakes a second time. Changing structures of thinking, planning and development were already in place. The purchase of the iMacs now meant that every staff member had an up-to-date desktop computer that was linked to a faculty wide standard operating system. The notion of dual computer platform operation and only one computer to share for the majority of academic staff - could be relegated to history.

The new role of the teacher

In the traditional model the professor professes. In the new model, the eTutor is expected to be a content expert, learning process designer, and implementation manager. This premise was echoed in the Faculty of Education and Creative Arts' motive to rethink and rewrite of the Bachelor of Education resulting in the creation of the new program Bachelor of Learning Management. Yeung (2001, p.9) extended our thinking a little further 'Faculty will also be motivators and mentors, interpreters (especially of non-codified knowledge), and 'expert learners' — people who lead the learning process by blazing the trail and setting the right personal example.'

It was becoming obvious that the notion of senior staff as 'information dissemination' vehicles supported by postgraduate students delivering a Q&A' tutorial model may have reached its expiry date.

Examination moderation and The Virtual Conservatorium

One of the most subjective assessment items within *The Virtual Conservatorium* was that of the Chief Practical Study end of course Performance Examination. With the integration of the standard assessment calculation excel document developed by CQCM much of the variance and deviation in assessor's grading was no longer an issue. The difficulty lay in setting the benchmarks for the grading levels across the larger conservatorium. In the on-campus examinations model the performance exams were video-taped for possible result disputes and the Program Co-coordinators were physically present to moderate all exams within their program.

To achieve this in the new context, all undergraduate performance exams were moderated by the Manager of *The Virtual Conservatorium* with the CPS staff member/mentor also present. This examination was executed in the student's home base

location, either in one of the Learning Network Queensland's studios or a venue agreed upon by the Manager of *The Virtual Conservatorium* and the student.

During this examination a digital audio recording was made and within thirty minutes of the completion of the examination two CDs were produced. One was presented to the student and the other was filed for future reference. This process was unique to *The Virtual Conservatorium* and received positive review from students and staff alike.

The assessment feedback forms were completed but not given to the student until all CPS examinations were complete, and the Manager of *The Virtual Conservatorium* approved the outcomes.

The essential role of eCommunication

The Virtual Conservatorium had identified a number of communication vehicles for student/staff interaction. These were written letters (snail mail); email; telephone; notices on television monitors and notice boards; IRC (online chat); videoconferencing; and mobile telephone SMS.

Many of these formats were standard communication protocols for universities. IRC differed from email in that it was synin nature whereas emails were asynchronous. One of the modes of 'eCommunication' utilized by The Virtual Conservatorium was SMS. Short Message Service (SMS) or as it is commonly referred to as 'text messaging' was an asynchronous form of communication between mobile telephones or between a computer and mobile telephones. Once the message was sent the recipient's telephone would signal the user until the message was read. Such issues as reminders of assignment due dates and class changes were efficiently and effectively distributed to the virtual student body. Increasing use of this medium was expanding as noted by DeBrito (2002, p.30) 'Telstra's mobile network handles more than 80 million text messages a month and has experienced a growth rate of 1000 percent in SMS (short message service) traffic in the past two years.'

In a survey of on-campus CQCM students in May 2002, 97 of the 106 students owned or had regular access to a mobile phone. All of these students claimed to use SMS on a regular basis and generally in preference to making a personal telephone call.

The role of the Electronic Administration

In addition to *eRolment* CQCM had appointed an electronic administrator (eAdministrator) to facilitate all aspects of enrolment, progress and result documentation. This added a further personal dimension to the project. According to Honeywell and Blythe (2001, p.30) we were now dealing with a market segment best described as iCons or iConsumers 'These third wave iCons characteristics and beliefs are specifically - individuality is power; personalization outranks customization; the edge is the place to be; and change is evolution.' (p. 30) This described our current undergraduate virtual cohort surprisingly well.

Financial management of the initiative

The conservatorium had set up a comprehensive financial reporting system for *The Virtual Conservatorium* initiative managed by a full-time member of the administration staff. The domestic, government funded, undergraduate program within *The Virtual Conservatorium* operated within a 'break even' scenario. The postgraduate, full fee-paying element operated as a profit centre.

Virtual 'pastoral care'

A vital ingredient in the process was the appointment of an electronic carer (eCarer) who took responsibility for welfare and pastoral issues associated with the online student. This

eCarer was responsible for ensuring that *The Virtual Conservato-rium* student community did not feel alone or isolated. The intention was to make members welcome and feel valued. Regular phone calls, e-mails and mail gifts assisted the process. We found a summary by Dutka (1999, p.26) useful to our decisions on many of these matters -

- Three-quarters of companies give business gifts
- More than eight out of ten executives think that giftgiving is useful
- Gifts create a sense of 'indebtedness' on the part of the recipient
- The best gifts are universal, original or useful
- The most frequently given gifts include foodstuffs (candy, nuts, fruits and meats), pen sets, clocks, watches, clothing, stationery, cash and gift certificates
- Computer-related gifts (mouse pads, diskette boxes etc) are increasing in popularity
- Gifts that are in some way personally significant make the greatest impression
- Gift wrapping and handwritten cards make the most impact

Enrolment Issues

Prior to 2001, successful applicants enrolling in Central Queensland University courses completed a computer data input form with a lead pencil and submitted this form to an administrative assistant to process. The system was cumbersome, troublesome and fraught with potential errors. It became a matter of necessity to address this tired practice. 'Responding to this imperative, the University has invested major resources (\$20M) to implement new PeopleSoft administrative systems, although problems in system conversion have impacted adversely on financial reporting capacity.' (Central Queensland University

Handbook 2001). In 2001 *eRolment* became a standard enrolment application for all continuing and new students. It was ideally matched to the needs of *The Virtual Conservatorium*.

THE DIFFICULTIES THAT WERE ENCOUNTERED AND HOW THEY WERE SOLVED

In this chapter we identify the hurdles that had to be overcome in relation to the creation and delivery of product within *The Virtual Conservatorium*. These hurdles included changes to the physical educational environment; the conversion of the Bachelor of Music/Performing Arts, that had previously been delivered only F2F on-campus, into a workable virtual model; and the personal attitudes of many staff and students with certain established mindsets that had to be considered and dealt with in this process.

Physical Infrastructure - the on-site learning environment

In May 2001 the Mackay Conservatorium Centre took up residence in its new facility on the Mackay University campus in Planlands. This building was designed to service not only the needs of the on-campus CQCM students but also the needs of future distance education offerings. We had ensured this duplicity in the building and outfitting process. The building project, overseen by a Project Manager briefed on our needs, had in-built

features such as wireless LAN and internal video communications. Most rooms within the conservatorium precinct served multiple purposes such as 'The Green Room' was also a conference room; the foyer was also a dance rehearsal space / performance stage / function room. This multipurpose usage of rooms meant that the building could be completed within the budget framework of \$4.75 million dollars with little significant compromise.

The Virtual Conservatorium began accessing all of the building's spaces 18 hours a day, 7 days a week. This was soon extended to a 24 / 7 model following current eBusiness trends. The audio and video components of the theatre were utilised to produce synchronous and asynchronous course materials.

The establishment of Computer labs

As well as the three on-campus computer labs in Mackay, CQCM had set up internal iMac Labs as well. Johnson (1997, p.47), supported the choice of Macintosh computers and argued

'The costs are low, the risk is low, it's good for the future of our profession, and it seems to be a computer that my staff and I can use without it getting in our way. The difference is less than what it used to be, but it's still there. In short, the Mac does things which allow us to focus more of our energy on being designers and less on being computer-users.'

These computer labs were divided into two distinct categories. CAL (Computer Aided Learning) labs housing 10 iMacs, each set up with the appropriate software and simple hardware additions such as Sennheiser S45 headphones. Composition Labs utilising more highly powered iMacs with upgraded RAM and hard disk space; Composition software — Logic Audio,

Finale, Band in a Box; and appropriate hardware such as mixing consoles, sound modules, and audio monitors.

Multimedia Studio

The Multimedia Studio housed the equipment required by the composition department. Prior to 'Project Uptech' this equipment was either reclaimed from other department upgrades or was six to ten years old. The studio was in need of an update. This was facilitated in 2001. It was decided that the latest iMac had specifications that easily met the software requirements. The iMac also had built on-board dual 'Firewire' and dual USB ports which met the hardware recommendations.

To create the multi-timbral sounds generated by the MIDI (Musical Instrument Device Interface) software three manufacturers were considered namely Roland, Korg and Yamaha. The most suitable sound module - the Yamaha MU-90 was selected. Two Evolution MK II keyboards were also purchased as MIDI control keyboards.

The MIDI hardware also required an interface unit to connect to the iMac computer. This was an oversight in the initial 'Uptech' proposal and changed the budget allowance for the Multimedia Studio. The purchase of the other audio/visual equipment was then postponed and purchased in a later 'Uptech' proposal.

Recording Studio Development

The Recording Studio was indicated on the building plans as the 'Control Room'. In the original designs for the building there was to be a separate 'Bio Box', which housed all the control equipment for the theatre's sound and lighting, and a distinct 'Recording Studio Control Room'. As an economic rationalisation in design these two rooms were combined and placed between the Auditorium and the Studio Recording Room. This

meant that this room was not only a critical technical hub but also the most appropriate vantage point to view the inside of both of these prominent performance and recording spaces.

Control Rooms are normally only ever occupied by theatrical technicians and tend to be kept in an untidy manner. It was necessary then for us to emphasise both functionality as well as aesthetics — a difficult combination. In stark contrast, Recording Studio Control rooms are very public spaces and as such are normally maintained with a high degree of presentation. As a combined space, the room had to perform numerous functions but also act as a public observatory and commercial studio. Furnishings, including lounge chairs that match the decor and style of others in the building and office chairs gave the space a commercial finish and appeal.

The Audio Console also needed upgrading. The 16-channel Yamaha MC1604 was now considerably underpowered to cope with the new demands of the larger theatre. A near new Mackie 48 channel programmable console became available in Mackay. This audio console was being offered at approximately 30% off its current retail price but was still greater than the budgeted allowance. It was decided to sacrifice elements such as wall finishes, 12-volt lighting, and extra furnishings to purchase the large format console. This choice proved to have been a wise one. The studio then steadily increased commercial business and was being booked by national artists such as Graeme Connors (Up Close, 2003) and Art Phillips. The programmable aspect of the desk had contributed to eliminating the need for hiring outside venues for theatrical performances within the conservatorium. Clients such as schools and dance academies saw the CQCM Theatre as a viable alternative to the larger and more expensive Mackay Entertainment Centre since the technical facilities were comparable and the price more competitive.

Internal Communications System

The Internal Communications System provided a range of centrally controlled monitors capable of presenting essential information. The monitors also doubled as TV monitors onstage, backstage and in the foyer for cast and late patrons to view the performances within the theatre precinct, commonly known as 'show relay'. The monitors also provided the opportunity to present electronic noticeboard information.

A total of 8 televisions with wall mounting brackets were purchased from the 'Project Uptech' funds. One 80cm stereo for the Conference Room; two 51cm AV stereo TVs for the Foyer; two 48 cm for onstage; one 48 cm for the control Room; and two smaller 34cm units for the Directors office and backstage.

The final result was that the public areas of CQCM were free from the clutter of standard university notice boards; only accurate and appropriate information was displayed which was continuously updated; promotional material could be broadcast throughout the conservatorium precinct; the performances on stage could be monitored from most places within the building including dressing rooms and corridors; and computer images could be projected to all televisions and standard television viewing is available as required in the 'Green Room' and dressing rooms.

Adapting the Bachelor of Music/Performing Arts course structure to a virtual delivery-based model

To begin the process of converting a completely F2F delivered program to a multi- modal delivery model - that would be successful for both on and off-campus students - the program needed to be broken down to its component parts. Identification of the most appropriate delivery paradigm then had to be made for each of the courses.

The Virtual Conservatorium existed in a unique pedagogical space. It was neither a traditional F2F nor Synchronous design, nor did it fit within the Asynchronous Learning Network models. It was not a truly distance model, as regular F2F tuition was given locally. Although many on-campus students utilised The Virtual Conservatorium's courses it does not fit within the oncampus model. It was a complex response to a set of new, complex demands. The Virtual Conservatorium utilised a relatively traditional approach to the delivery of Chief Practical Study (CPS) and ensemble courses. In these courses the students and staff interacted F2F in the same physical location. The online delivery of some academic courses mimicked the pedagogical concepts of ALNs. The Virtual Conservatorium used forms of Asynchronous communication such as email, but further developed this to include synchronous communication such as ISL. Software based delivery (CAL or computer based learning) had similarities to distance education packages currently in use in other Australian universities. The use of CQCM generated study guides was also a standard distance delivery tool. Given the nature of the overall learning environments, the title 'virtual education', an amalgam of the four delivery models considered was the only suitable title for the delivery format of The Virtual Conservatorium.

The considerations of the 'human factor' in the conversion to virtual mode

One of the debates raised by Killian (1997, p.2) was that Technology can leverage time but not completely replace human contact without quality losses 'Compared to a normal 'chalk and talk' classroom, the computer monitor is an information desert. In the classroom, nonverbal communication never sinks below a roar; even the student who's totally clueless sends out an SOS with every glassy-eyed' blink.'

Illing (2002) highlighted that arts faculties in Australian Universities were slow in taking up the online option of teaching and learning. Charles Sturt University's then Dean of Arts, Ross Chambers, however, believed online delivery could enhance offerings and was committed to the development of a number of undergraduate offerings. There was still significant division of thought on the suitability of the mode and the actual subject selections to be made available by various arts faculties. Stuart Macintyre, the Dean of Arts at Melbourne University at the time, believed that face to face contact was still highly desirable in a range of offerings which would lose out if delivered in an online, no contact mode.

The elements that contributed to the notion of the 'human factor' should go beyond the idea of having a physical human being at the other end of a classroom and should include other 'human' issues as well. *The Virtual Conservatorium* considered other issues such as lifestyle, customer satisfaction, learning style, the role of the teacher and fear.

Lifestyle Issues

Broderick (1997) in preparation for his proposed 'spike' managed to avoid the constraints of an office and time bound job. He commented that 'it isn't hard to find gratifying things to do to fill in the time, even when you are deprived the merriment of the office, farm or factory.' (p. 256) As a workforce, people had forgotten or postponed the human issues of lifestyle. People leave the family home at about 7am and return home at about 6pm. Travel time consumed up to 25% of this time. Breaks and meals equated to about 10% of the time away. It was possible to assert that *The Virtual Conservatorium* reconfigured the working day to that which is suitable for staff and student alike, allowing time for 'other things'.

Customer Satisfaction

In the business community customer satisfaction equals the difference between success and failure. Collis (1998) noted that it costs a company six times as much to attract a new customer in comparison to keeping an existing one. Customer grievances were commonplace and were vital feedback mechanisms in eCommerce. Collis provided the statistic that 7 out of 10 customers will do further repeat business if there is a satisfactory outcome to the complaint. *The Virtual Conservatorium* had implemented the staffing of an eCarer as the first port of call for student disputes. If resolution could not be reached the problem was forwarded on to the Manager of *The Virtual Conservatorium* for resolution.

Dutka (1999, p.248) believed there are 11 principles to successful customer retention. In tertiary education they related to virtual studies in the following manner -

- 1. Product guarantee Quality Assurance ISO compliance
- 2. High quality products Course material quality, monitoring and updating
- 3. Availability Subjects available to suit the student's timeframe rather than the universities/lecturers
- 4. Sales Representatives who are knowledgeable Marketing brochures for *The Virtual Conservatorium* have a cut-out business card: 'Manager Virtual Conservatorium'
- 5. One convenient source http://www.thevirtual-conservatorium.com that is linked to http://www.edca.cqu.edu.au/cqcm. All material is available under the 'virtual' tab
- 6. Wide range of products pre-tertiary, undergraduate and postgraduate

- 7. Fair price there is no difference in costs to the student between virtual and on-campus study. The true cost savings are in the delivery costs of the virtual model
- 8. Trustworthy advice
- 9. Information on how to use a product each of the courses have differing technical and submission requirements. These will be clearly identified in the course profiles
- 10. Meeting Government regulations
- 11. Product samples a CD ROM will be generated with demonstration versions of the software and URLs of online material and requirements

Until a formal arrangement was made with Rising Software, Binary designs put a *Virtual Conservatorium* sticker on the external packaging of any software purchased by students of *The Virtual Conservatorium*. It was our intention to take customizing and personalizing to a higher level.

Fear

One of the possible debilitating aspects involving the implementation of *The Virtual Conservatorium* was the fear of failure. For most businesses the 'fear of failure' issues are as common as the 'desire for success'. As McCormack (1994. p.246) pointed out 'if properly harnessed, it can be the energy that drives the wheel.' Learning, to *use* this fear rather than letting it use the institution is of primary concern for entrepreneurial enterprise.

Levine, Locke, Searls and Weinberger (2000) took a slightly different view. 'The web liberates businesses from the fear of being exposed as human, even against its will. It throws everyone into immediate connection with everyone else without the safety net of predefined roles and authorities, but it also sets the expectation that you'll make human-sized mistakes frequently.' (p.126) The often cited de-humanising web can therefore be

viewed in an entirely new light - as a democratic environment rather than the stereotyped sterile, automated image that is often portrayed by the mass media.

THE UNEXPECTED THINGS THAT CROPPED UP AND MIGHT BE USED

In this chapter we identify elements that emerged unexpectedly or ahead of predictions while developing the pilot program of The Virtual Conservatorium at both the undergraduate and postgraduate level. In the undergraduate arena we were taken by surprise when the distinction between on-campus and virtual students had almost completely vanished within 6 months of the eBMPA's creation; the on-campus students petitioned CQCM management to be given access to the virtual materials in place of the traditional classroom model that we were offering simultaneously; the courses in History, Writing Techniques and Musicianship had to be modified in terms of delivery model to suit the needs and requests of the student body; the communication protocols created for the off-campus students became a standard part of our on-campus communication protocols by demand; and the emerging importance of tutorials for congregated cohorts. Postgraduate virtual delivery trials had identified the unexpected issue of electronic data delivery (CD Rom) being preferred to print materials and web-based materials.

The distinction between the distant and on-campus student

It was assumed that the distinction between on-campus and off-campus programs would diminish at CQCM as students enrolled in The Virtual Conservatorium and students enrolled in full time internal studies would be working in the same academic environment. We had predicted a period of two to three years before this distinction would become blurred. Instead - it had only taken six months for the undergraduate distinction to become difficult to determine. Inglis, Ling and Joosten (2000) discussed the American University structure which employs strategies for on-campus students that include, time and place flexibility such as syndicate work, use of distance education materials, use of television and video materials, world wide web (www, email) and of computer-mediated programs' (p.21) It was our view that this delineation of boundaries between internal and external students may lead to the re-evaluation of the definition of 'campus'.

Toroff (1997) discussed the statistical data gathered at New Jersey Institute of Technology (which has been delivering course materials using ALNs since 1976) and highlighted that about 80% of the students enrolled in distant credit courses based on conferencing technology were full time on-campus, internal students. As the Central Queensland Conservatorium of Music Annual Report 2001 (p.15) indicated 'Virtual' studies at the conservatorium accounted for 570 enrolments (or 71 full time students). These students were from a population base of internal full and part time CQCM students and internal full and part time CQU students from other faculties.

Turoff (1997) further recommended the importance of 'remote technologies' in 'regular courses' and the integration of distance students into 'regular courses.' The Integration of distance students into regular classes was also a way to support small class sizes. Turoff (1997, p. 20) in addition forwarded the notion that

'there is little doubt at this point that technologies being employed for the distance students are or could be a boon to the improvement of the quality of education for the on-campus students.'

By combining the 'on-campus' and 'off-campus' student body into one class removed the contentious issues of parity raised by those opposed to off-campus education methods. Turoff (1997. p.13) warned of the fallacy of treating the two different student populations differently when it would be impossible to differentiate from one another. His article predicted that much of the future course work at universities would be done remotely, so the distinction would essentially disappear.

Tucker (2001) and Fitzpatrick (2001) both supported the view that there was a public and political motive, especially in geographically remote areas, for the support of distance methodologies. They noted that in some US states, policy leaders were recommending the use of distance education to replace traditional learning environments.

Krupitz (2002) argued that technology does not always make communication more efficient. This was especially evident in cross-cultural negotiations. As an example, an American firm installed video-conferencing hardware to reduce the need for unnecessary travel and speed up negotiations. They soon found out that although their local managers were conducting meetings electronically they were still travelling to meet with the second party afterwards. The reason given was that their Thai managers wanted to meet in person to gauge the reaction of others. Krupitz (2002, p. 3) concludes that 'Electronic delivery can approximate but not duplicate face to face interaction even when supported by two-way audio and video'. We acknowledged the need for options.

Access to the virtual materials for both on-campus and virtual students

In Week 9 of Autumn Term, 2003 a petition was lodged with the convenors of the Bachelor of Music Theatre and Bachelor of Music/Performing Arts. This request was signed by twenty-six first year *Writing Techniques* students who were at that time receiving their lectures via a traditional classroom-based lecture scenario. After hearing about, and in some cases seeing, the VCDs created for the virtual delivery of this subject they requested this format in preference to the weekly lecture on-campus. Points raised by these students included the arguments that VCDs were concise and time effective; there were no late starts, silly jokes/questions and dis-organisation; they could be reviewed easily for study purposes; and the VCDs could be accessed at a time that suited the student. We obliged.

Modification of predicted delivery models

In the courses *Writing Techniques 1 and 2*, we had assumed certain delivery methods would be suitable. Changes to these had to be made during the semester to better meet the needs of the students. Writing Techniques 1 and 2 were originally planned to be delivered via ISL to all students based in Mackay, Rockhampton and virtually - simultaneously. This had implications of time limitations for the virtual students so we created specific VCD classes to accommodate these needs. The 60-minute lectures were created using a stage environment rather than a lecture room with overhead cameras, rear screen projectors, grand pianos and the like. The coursework content was divided into easily digestible modules.

Communication protocols

For the virtual students who are unable to access the internal communication system in Mackay, we found it necessary to set up a strategy of regular communication with students in individual courses. To do this we were able to create email databases of addresses of students in each class in the virtual courses and regularly electronically contact the students with course details, reminders of submissions, and the like. Some courses offered in 2003 were for Mackay students only. For these students, general communication was made via the academic noticeboard and the internal communication monitors. After notifying the students of a change of teaching date using these traditional methods, a number of the classes missed the changed class. When quizzed about this a common reply of 'you didn't email me or SMS me of the change' indicated that the on-campus students were keen for the same individual communication attention received by the virtual students.

The importance of tutorials for congregated cohorts.

It had become apparent that the students on-campus were not requiring/utilising tutorial time evidenced by the fact that attendances to these tutorials had dropped to below 10% of enrolled numbers and quite often student attendance to these was nil. In contrast to this, the Brisbane cohort of nine undergraduate Bachelor of Music / Performing Arts students had requested a weekly tutorial during week one in Autumn semester. A twohour session every Tuesday of term time was instigated and since then there was a regular 90% attendance every week and those who missed generally phoned to apologise. When asked about this the Brisbane cohort responded that it was during this tutorial time that they felt that they achieved a sense of 'campus life' and that the time together removed the feelings of individual isolation. This raised the point that future cohorts needed to be planned in the Bundaberg region to service the needs of students.

Electronic data delivery (CD Rom) in preference to print materials.

We had been teaching the Master of Arts Administration program using printed study guides with web-based support materials since mid-2002. In the Autumn semester delivery of the Research Project F2F component in Sydney we developed a CD Rom to accompany the study guides. This CD was specifically created for the MAA Research Project. The package was set up to be navigated using a conventional web browser (such as Internet Explorer' or 'Netscape Navigator') and contained the teaching materials and associated readings for the course. The feedback indicated that the CD Rom style of delivery was significantly preferred to the paper format because it wasn't as bulky to transport; it was technically current with other market trends; and it did not consume time and expense having to constantly download information from the web. It had become easy for the students to carry a laptop and work wherever without the excess baggage of printed materials or the need for an internet connection. It was revealed that some students were able to continue studies on the train whilst commuting while others reported the advantage of being able to study in parks / outdoor during breaks instead of being forced to study indoors. We predicted that part of the package fees for postgraduate studies would include a complimentary laptop and software before much longer. The 'look' needed to be maintained. These CD ROMs contained the thematic corporate development with the printing on the disc being consistent with the MAA design, and the html format data contained within, replicated that same image.

THE RESULTS INTERPRETED FOR A NON-SPECIALIST READER

In this chapter we investigate the results associated with the process of design and piloting of *The Virtual Conservatorium* and in turn examine the outcomes that had been produced. There had been three predominant areas of change that occurred as a result of the project. These are budget growth and stability; increased enrolment numbers; and the creation of new delivery paradigms that have pervaded the existing conservatorium framework.

The Conservatorium experienced significant patterns of growth reflected in the gross income patterns from 1999-2003 –

8	1999	2000	2001	2002	Sep-03
Student Numbers	86	210	290	365	432
Postgraduate	0	50	90	115	130
International	0	15%	30%	40%	34%
Performances	*	108	178	344	400
Media Hits	*	103	238	469	670
External Publications	*	6	9	10	31

Internal Publi- cations	*	13	42	43	39
Grants/Con- sultancies	*	-	72,500	77,400	199,300
Delivery Sites	1	5	7	8	10
Gross Income	lm	2.3m	4m	3.4m	3.6m
Accumulated	(lm)	327,000	917,000	1.2m	1.5m
Net Profit/Loss	-350,000	327,000	590,000	296,000	354,854
Auditions	56	88	92	149	1 14^
QTAC 1" preferences	50	68	86	78	95
QTAC total	91	159	211	168	215
Non-Govern- ment funding	*	36%	69%	64%	42%

The projected gross income for 2003 was \$3.6m given anticipated growth of programs; additional initiatives extending CQCM operations to 10 locations; and the management of the Central Queensland University Language Centre. We anticipate a surplus of \$350,000 for 2003 and in 2004 a \$4m gross income with a surplus scenario of \$700,000. Under new management from the start of 2000, the Conservatorium was experiencing significant growth patterns that would recur for five years and then most likely plateau out at approximately a \$4.5m gross income in 2005. It was important to note that this type of growth had a finite life span of perhaps four to five years after which time it would flatten out and possibly decline. Baghai, Coley and White (1999, p.3) reminded us that 'only an exceptional organisation manages to sustain growth when its core business matures. Just one out of ten companies that exceed the growth of their industry in any year is able to repeat that performance every year for a decade.'

It was our view that innovation required a 'critical mass' of business activity to generate suitable financial surplus, which in turn facilitated new initiatives. Prior to 2000 innovation was difficult given an ongoing deficit scenario. *The Virtual Conservatorium* had already increased the gross income of the conservatorium budget. Given the new context and climate our attention had subsequently been drawn to developing other sustainable projects such as the online aspects of *The Virtual Conservatorium* evidenced in the post graduate full fee paying project, the MAA online.

Using the "10 Principles/Indicators of Good Practice for Online Delivery" to interpret the success of *The Virtual Conservatorium's* results

We found the Inglis, Ling and Joosten (1999) indicators a useful framework on which to judge the progress and development of *The Virtual Conservatorium* in non-specialist terms. Inglis, Ling and Joosten (1999, p.61) further provided a quality assurance framework for best practice in the new learning environment. They commented, 'The primary purpose of the framework is to provide a set of principles and best practice indicators which address the essential areas in the quality provision of on line learning and new learning technologies and against which managers can assess the extent to which they have achieved "best practice".'

A number of considerations by Inglis, Ling and Joosten (1999, p.157) regarding exemplary practice associated with online teaching and learning activity raised the matter of best practice. They described it appropriately 'In general, the features of best practice companies are those that simultaneously improve the quality, selection and delivery of their products or services, use technology to advantage and maintain close links with their customers and stakeholders.'

Given the fact this project was essentially being developed "from the ground up", we had a wonderful opportunity to ensure quality mechanisms were put in place and best practice was embedded and followed carefully. Combined with this we had sensed significant commitment on the part of the project team to create something new and exciting inside a traditionally conservative environment. We had a clear strategic intent and a doable timeframe that we were confident would be met. Prahalad (1998, p.69) encouraged this when he argued 'companies need to have a strategic intent — to have an aspiration that is widely shared, to have a goal which is clear and to have an obsession with winning — that is the fuel that drives the engine.'

The current project team had this necessary obsession with winning and we had endeavoured to encourage the notion from the outset. We attempted to demonstrate productivity (income/expenditure) on a monthly basis to all participants in an effort to allow them to enjoy the 'game' and the journey as much as possible.

We instigated the first *Conservatorium Leaders of Business Activity* Meeting (CLOBA) in February 2002. This represented an opportunity for various elements of the larger Conservatorium to come together and share their intent and achievements. *The Virtual Conservatorium* was given ample time to present its current state of play. It had already been flagged as an ongoing key initiative for the future and had been well received by the larger Faculty in which the Conservatorium was located.

Principle 1: 'Good practice for online delivery involves informed planning and management of resources.' (p.175)

The first level of the undergraduate eBachelor of Music/Performing Arts was advertised in April 2002 with its first intake at the commencement of Autumn Term (March) in 2003. Negotiation with the larger Faculty resulted in additional EFTSU funding at the lower education rate of 25 students each year for 3

years creating a total of 75 extra funded places for CQCM making the eBMPA the largest of the five undergraduate offerings from 2005. Based on the first undergraduate intake demographics we had placed an initial group of 10 students in the southeast quadrant of Queensland based at a private school. This served as a delivery site for four face-to-face intensive delivery courses (each of 3 unit points). An additional 17 students located at other sites spread along the east coast of Queensland had been established. A second cohort was based in Rockhampton with another rotation of four face to face 3 unit point intensive delivery courses available to virtual students. A third set of intensive course deliveries was also available on the Mackay site accessible to virtual and on-campus students alike.

From the outset the project team developed good planning and management strategies. The move to a purpose-built facility in Mackay in June 2001 meant that we had a unique opportunity in the Mackay environment to ensure that CQCM developed a facility suitably equipped to facilitate the growth and development of *The Virtual Conservatorium* alongside the key elements of the new and emerging eConservatorium.

It was important to note that full-time, campus-bound domestic students may also access the electronic deliveries available. Having established a suitable and appropriate setting, the project team set about scheduling electronic offerings, trialing them with current undergraduate students throughout 2001, and generally 'talking up' the concept and securing support from the larger institution. In September 2003 we currently had available for our use an impressive range of products that could be incorporated into the undergraduate or post graduate offerings for 2003 and beyond.

Principle 2: 'Good practice for online delivery involves sustained, committed leadership' (p.177)

Post graduate students had been accessing the resources on and offline since 2001. The electronic program, the MAA online, formally became available for Winter Term (July) 2002. The program had been very popular in the first twelve months with approximately 30 online students currently enrolled in 2003. The program operated (face to face intensive) in Sydney, Rockhampton and Melbourne. The face-to-face enrolment in these areas combined was 100 full-time students in 2003. The inclusion of a further 30 online students brought the total number of post graduate students in this award to 130 making it the largest post graduate conservatorium entity in Australia. With a gross income of approximately \$1.2m this is an impressive outcome. Clearly, there was evidence of appropriate planning and development of both products and resources. This commitment was ongoing and would continue to be a feature of the eConservatorium operation. The MAA online (The Virtual Conservatorium) students were able to access F2F deliveries at three sites and in fact were required to complete two of the seven components of the award at any of the three sites.

Developing realistic timelines had been essential but we also realised early that there was a need for speed in these matters. Hamel and Prahalad (1996, p.135) reminded us that 'Every firm must proceed toward the future with all due haste. But the way to measure speed in the journey to the future is not how fast one is committing financial resources, but how fast one is gaining additional insight into the precise route that will get one to the future first ...' Accordingly, we made gains in the operating and design context that placed us well in relation to future initiatives and diversity of the project.

Our project team was ever conscious of the need to achieve our goals of online delivery as quickly as possible, but we were also mindful that in order for our collective reputations to be enhanced we needed to not only offer this initiative but also ensure the quality of our delivery. Fortunately, we had significant opportunity to trial product in a range of locations and we felt we were able to 'provide the goods' so to speak from the outset. Contemporary management was not only about managing resources and product it was very much, in the new economy, about managing fast timelines as well. We adhered to the philosophy expressed by Jennings and Haughton (2000, p.2) 'whatever you do, you know the new truth, It's not the big that eat the small. It's the fast that eat the slow.'

Principle 3: 'Good practice for online delivery involves improving access for all clients, incorporates equity and promotes cultural diversity.' (p.177)

Access to *The Virtual Conservatorium*, and in turn the online resources, was a critical consideration in the entire process. Essential to the success of the program was the maintenance of good quality access mechanisms for students. The portal website (www.thevirtualconservatorium.com) needed to be easy to access and equally easy to navigate once inside the gateway. A second point of entry was the conservatorium's web address (www.cqu.edu.au/cqcm) that provided the opportunity for the virtual student to view other interesting information about a range of issues associated with the larger conservatorium. The feedback clearly indicated virtual students enjoy the access to the larger site and frequently visited and explored unlike full time on- campus students.

Access to the individual courses needed to be simple with immediate response mechanisms. After considerable discussion the project team felt whilst consistency in course front page design was desirable the actual format of each of the courses could vary depending on the nature and style of the course. Post graduate feedback actually negated the need for standardised course formatting. The majority of postgraduate students interviewed

felt that the variety of formats actually maintained a higher level of user interest. We pursued this model.

The development of the eConservatorium to its full potential was an important priority within the conservatorium. We became responsible for the delivery of product to ten locations including Mackay, Hamilton Island, Rockhampton, Gladstone, Bundaberg, Pomona, Brisbane, Sydney and Melbourne. Cyberspace (the tenth location which was electronic in nature and utilised the world wide web) had as much of our attention as any of the other projects, perhaps more.

We were personally committed to the development of online product. We had considerable experience with the electronic medium over the last 5-6 years and we felt confident that the direction we were taking with resource development and delivery was appropriate and well timed. Timing was a fundamental ingredient of the success of these projects and the timing was right at this institution. The development of *The Virtual Conservatorium* was incorporated into the larger conservatorium's strategic intent and certainly would become an important feature of the institution in the years ahead.

In order to ensure that the eConservatorium momentum was sustained the development was broken into two distinct parts, the undergraduate award and the post graduate award. We had personally been directly involved in the development of product, the online testing, and the actual electronic delivery for a number of years. We intended to maintain a significant role in the immediate future as program coordinators. There was also evidence of strong support from senior management of the Faculty for the initiative. We believed this principle was well established and would remain a feature of the program.

Leading the new conservatorium forward was about changing 'the game' and developing new initiatives on an ongoing basis. We concurred with Gibson (1998, p.7) when he argued 'In the twenty first century, the winners will be those who stay ahead

of the change curve, constantly redefining their industries, creating new markets, blazing new trails, reinventing the competitive rules, challenging the status quo.

Our leadership was about much of what Gibson projected and we believed we could sustain a high level of enthusiasm and commitment to the process. This had already been evidenced in the significant growth of the conservatorium business over the last four years and the nature and speed of projected initiatives.

Effective leadership of projects such as this one certainly required the support of senior management but the success in terms of development and growth would centre on the fact that a number of people were involved in the design and direction and played significant leadership roles along the way. Kotter (1998, 177) explained this well - 'In the future, with a smaller mother ship and all these little satellites, one person isn't going to do it. Every one of those satellites is going to have to have somebody or some group of people in it that is sensitive to culture. So we're back to 'multiple leaders' again.'

From the outset we had attempted to provide opportunities for interested key players in the initiative to assume leadership and development roles. For reasons of sustainability it would be essential to encourage more and more potential leaders and contributors into the operation of *The Virtual Conservatorium*. Too often, quality initiatives fade with the passing of a single champion.

Principle 4: 'Good practice online delivery involves understanding the requirements of the learner and reflects stakeholder requirements.' (p.178)

Having been involved in the delivery of product online for a number of years we believed that we had suitable background in and understanding of design and delivery mechanisms. We established beta testing mechanisms and in the early stages invited students to meet and respond to design, colour, stimuli and access.

We piloted a number of *The Virtual Conservatorium* initiatives including software-based learning activities; online learning; and ISL based delivery. We constantly modified our designs based on the feedback we received from students on-campus utilising the innovations developed and we feel confident that they were well received and utilised by current distant/online users.

A feature of the online delivery was the use of an interactive eTutor who ensured that students had the opportunity to question, comment and respond to various resources in a way that cannot be achieved in the simple provision of online resources alone.

In the new conservatorium we could already see a mix of provider and customer interaction. We envisaged the boundaries between the two groups fading or blurring out as interaction increased and the notion of co-learning developed. Kelly (1998, p.256) made it clear that -

'In this new kind of organisation, there is an increased blurriness and an increased uncertainty about who is actually part of the corporation, and who is not. In other words, there are lots of consultants. Lots of subcontractors. Lots of part-time people. Even the customers may at times feel that they are part of the company. There is kind of a blurring between the customers and the employees.'

With the use of a range of eTutors (from a range of locations) and the incorporation of an eAdministrator and an eCarer we believed the teaching and learning process would be enhanced significantly. We also believed that the nature of the interaction

between students and these various employees would be significantly different from the traditional teaching and learning paradigm within the face to face, on-campus operation.

Principle 5: 'Good practice in online delivery involves the design, development and implementation of programs for effective and active learning' (p.179)

Active learning was a priority within *The Virtual Conservato-rium*. The very nature of the web-based resources implied that students needed to be engaged in a different way to traditional in-class teaching. Our research reassured us that online students were particularly motivated (perhaps by the novelty of the delivery) and that their interaction with the eTutor took on a dynamic and interesting shape.

When designing and implementing curriculum we were conscious, from the start, of the fact that students needed access to materials using either PC or Mac platforms. For obvious reasons it was a basic requirement that all students involved in *The Virtual Conservatorium* were required to have internet and email access. Every attempt was made to internationalize the content of all the courses where appropriate. At the postgraduate level - case studies were varied and internationalised in all instances.

Principle 6: 'Good practice in online delivery involves creating confident and committed staff with new competencies.' (p.179)

The configuration of diverse workers, some part-time, some full-time, some in a consulting capacity was the new face of the new conservatorium and manifested in this virtual initiative. This model also required a shift in leadership mindset. Bennis (1998, p.149) provided us with a useful model: 'What leaders must learn to do is develop a social architecture that encourages incredibly bright people, most of whom have big egos, to work together successfully and to deploy their own creativity. '

We were committed to the involvement of quality staff in a range of designs. The involvement of 'industry mentors' - people who have high levels of industry currency - were essential to the success of this project. The notion of incorporating the involvement of these contributors into the online delivery and possible online tutorials had been explored and was a feature from the outset.

The use of the eCarer was also significant in so far as it provided the online learner with a support mechanism designed to assist the student not so much in an academic sense but rather in terms of support. We envisaged the eCarer profile developing within the next two to three years as a graduate of the program; an experienced eLearner him/herself; and of a similar age to the students enrolling in the two awards.

Involvement of key staff was fundamental to the success of any online activity. Hamel and Prahald (1996, p.139) made it clear when they wrote 'It is not cash that fuels the journey to the future, but the emotional and intellectual energy of every employee.' We agreed.

We had several full-time staff who were committed to the project and in possession of the necessary expertise and skill level to be valuable resources in the development of the project. There were a number of part — time staff who had been involved in the development of the resource base who were also invaluable members of the virtual team.

Principle 7: "Good practice in online delivery involves managing and maintaining the technical infrastructure." (p.180)

Of concern to us was the exclusive use of the University-based servers for storage of all teaching and learning resources. Within the last six months alone the University server (operating through the Mackay campus) had been inoperable for up to 22 days within a 120-day time schedule. This spelled disaster for

an entire entity reliant on internet and email access operating exclusively through the server. More recently the entire virtual resource was deleted from the site by error and took a week to restore after considerable effort on our part.

We explored the notion of a 'ghost site' for the embedding of resources and eTutor, eAdministrator and eCarer electronic access that could be called upon when the University facility became inoperable. This back-up scheme would enable an invisible detour that would ensure 24/7 operability. We believed this to be of significant concern. The notion of 'connectedness' implies that systems need to be put in place to ensure that all the elements of the larger organization have the necessary support and back up measures to ensure sustained achievement. Senge (1998, p.129) reinforced this notion of connectedness with the comment - 'We have to develop a sense of connectedness, a sense of working together as part of a system, where each part of the system is affecting and being affected by the others, and where the whole is greater than the sum of its parts'.

This suggested, to us at least, the need to ensure that volatile or vulnerable aspects of the technical operation had the necessary fall-back options and plans. We perceived the University server system to be a weak link in our system and we believed it necessary to develop other options as required.

Principle 8: 'Good practice for on fine delivery involves evaluating for continuous improvement' (p.180)

End of course evaluations were informative. They provided the opportunity to modify practice or delivery the next time around. Weekly eCarer interaction gave us a heightened opportunity to respond much more immediately. This was viewed as a key aspect of our quality assurance at micro and macro levels. Inglis, Ling and Joosten (1999, p.141) reassured us with their comment -'Evaluation is an aspect of courseware development that needs to be conducted from the outset of a media project

and undertaken during the course of a project to inform and modify development.'

Ongoing evaluation was an important feature of *The Virtual Conservatorium*. All course deliveries were evaluated on an ongoing basis in order to ensure high levels of customer satisfaction and continuous improvement of resource and delivery. A standard electronic survey device (similar to that that used by on-campus students) had been instituted and online students were required to complete the survey on completion of each course access.

Given the electronic medium and its penchant for speed, the notion of ongoing (quick response) moderation was invaluable. Changes to delivery were closely monitored by academic co-co-ordinators and facilitated by eTutors with the support of the eAdministrator and with the input and efforts of the eCarer on an ongoing basis.

Principle 9: 'Good practice for online delivery involves the provision of effective and efficient administrative systems and services' (p.181)

The technical aspects of the initiative were demanding. What had become apparent was that the access to design tools and delivery mechanisms had to be user friendly and the eTutors were themselves competent web designers and technicians.

The enormous advantage of this technical know-how was the immediacy of repair and reply. Student difficulties could be dealt with efficiently and effectively when the eTutor also had the technical know-how to deal with the matter.

Further, a key role played by the eCarer was to monitor, on an ongoing basis, the needs and responses of students within the initiative. The eCarer was committed to weekly interaction with the student that provided the opportunity for quality assurance management and almost immediate response to difficulties encountered.

Principle 10: "Good practice with online delivery involves supporting the needs of learners" (p.181)

We were keen to ensure that the learner was well supported, resourced, involved and included. The mechanisms associated with the eAdministrator (from the outset), the eTutor (as associated with the actual delivery of the individual courses), the eCarer (providing support and interaction on an ongoing basis) were significant contributions to the process of ensuring learning support.

The Academic Co-ordinator had the ultimate responsibility for the design, development and evaluation of the courses and overall program. Clearly the learner needs were foremost in every decision and any design alteration that was made. Senge (1998, p.137) provided a timely reminder - 'Sharing knowledge occurs when people are genuinely interested in helping one another develop new capacities for action; it is about creating learning processes. '

The Virtual Conservatorium, possibly more so than any other program within the Conservatorium, was keen to ensure that the learning processes adopted were 'student friendly' and transparent with the ambition of making the virtual experience a successful one and an enhanced learning opportunity. We were confident that the administration systems and services put in place were both comprehensive and supportive. The incorporation of the role of the eAdministrator was seen as fundamental to the success of the project.

THE SCIENTIFIC VALIDITY AND COMPLETENESS OF THE RESULTS

In this chapter we provide quantitative evidence of developments on financial growth during the period 2000-2003; developments in student population and shape; comparative budget figures; building design; resource development on site to support virtual initiatives; virtual and traditional F2F comparisons; ALN and virtual studies development; delivery and time factor efficiencies achieved; and undergraduate course redesigns.

In financial terms the conservatorium had a successful four years (2000 and 2003) following a number of years of financial difficulty. This newfound prosperity provided a canvas for innovation and invention that frequently had significant resource implications. From the beginning of 2000 the Conservatorium exhibited itself as a multiple location enterprise with a diversity of arts-based product. The Conservatorium delivered product to Mackay, Hamilton Island, Rockhampton, Gladstone, Bundaberg, Pomona, Brisbane, Sydney, Melbourne and Cyberspace.

This previous deficit scenario in 1998 and 1999, we believed, restricted the move into the new economy. But it was not the

only reason for hesitating.

	1999	2000	2001	2002	Sep-03
Student Numbers	86	210	290	365	432
Postgradu- ate	0	50	90	115	130
Interna- tional	0	15%	30%	40%	34%
Grants/Con- sultancies	*	1	72,500	77,400	199,300
Delivery Sites	1	5	7	8	10
Gross In- come	lm	2.3m 4m 3.4r		3.4m	3.6m
Net Profit/Loss	-350,000	327,000	590,000	296,000	354,854

Using the seven measures it is evident that growth had been significant during the four -year period. Gross income had developed considerably (peaking in 2001); full-time equivalent students tripled; and there had been notable growth in the post-graduate market. This growth had been essential to the future and sustainability of the organization. The issue of sustainability required immediate and focused consideration. Willcocks and Sauer (2000, p.9) emphasised the point in their comment '... sustainability is not achieved through any one thing. It requires the combination of a range of resources and services that together are hard to imitate.'

The accumulated deficit from these two years alone was almost \$750,000. This change from the deficit scenarios of 1997 and 1998 to the surplus environment of 2000 —2003 was attributed largely to the rethink that occurred with the adoption

of *The Virtual Conservatorium*. By addressing the delivery issues of the undergraduate and postgraduate courses within the conservatorium and increasing the critical mass of student enrolments we were able to repay the deficit and create a surplus net income figure on an ongoing basis.

Building Design

In the design process of the new Mackay facility the original specifications had to be dramatically reduced to fit inside the allocated budget for the building program. This meant that we had to reduce the number of dedicated spaces and create multifunctional spaces. The CQCM building had no defined lecture theatres within its roofline. The only provisions for teaching were practical performance studios and MIDI (computer) teaching laboratories. This design feature allowed the introduction of virtual studies to occur simultaneously on and off-campus.

Project Uptech — FECA allocation

A financial investment was made in CQCM by the Faculty of Education and Creative Arts upon completion of the new Mackay facility in mid-2001. This allowed us to progress 'Project Uptech' to not only include computer upgrades but also theatre upgrades. From this development we were able to use the theatre to produce various audiovisual teaching materials for *The Virtual Conservatorium*. These resources included the 15 VCDs created when using the theatre as a film studio. Complete with lighting and projection equipment through to the broadcast of concerts via web streaming and live ISDN radio links we were able to produce quality resource. Without the equipment we would not have been able to progress the project as quickly as we had done.

Comparisons of Traditional 'physical' F2F delivery models and the CQCM *Virtual Conservatorium's* 'virtual' model

The quality implications, advantages and disadvantages associated with a comparison of traditional F2F delivery and virtual delivery can be deduced –

ITEMS	PHYSICAL	VIRTUAL
Location	On-campus	On and Off-campus
Lecturers	Anybody who is available from within the faculty	Selective. Can be recruited from anywhere in the country
Course Content	As per Course Pro- files	As per Course Pro- files
Contact hours	Limited to class hours and lecturer's office availability	Continuous engage- ment in synchronous and asynchronous modes
Class experience	Students often do not prepare for class - they come to listen to a professor lecture.	to digest what they have learned; professor moderates
Class meetings	Face to face	Virtual, synchronous and asynchronous
Holidays	Holidays taken as per EB agreements	Very few holidays observed
Class cancellations	Fairly regularly (staff illness, unavailability etc)	Rarely
Class participation	Typically, class participation is low.	All must participate in the written form in synchronous and asynchronous modes

Class attendance	As the semester progresses fewer enrolled attend the class and thus defeat the purpose of F2F class meeting	100% class attend- ance required
Participation	Generally based on	Based on recorded
grades	instructor's memory	responses
Feedback	ated periodically at the end of a test or a	Continuous evaluation and real-time feedback
Assessments	Tests and quizzes, homework	Portfolio of tools
Lectures	Notes or audio are not archived and not available to students after the class	video lectures are ar-
Access to materials and references	Unlimited access could be provided but not practised	The virtual nature provides unlimited access
Syllabus	Sketchy and incom- plete syllabus is sometimes used	Must be detailed and complete
Course Evaluation	At the end of the semester with a long lag time	Online and real-time, no lag time.
Course audit	Faculty course files are not open for review	Always open to administrators and are reviewed periodically
Staffing	Predominately Full- time	Predominately casual

The pedagogical debates still exist but it seems that there was little disagreement in the implications listed. It is our belief that the benefits of virtual delivery exceeded expectations. There were broader pedagogical concept comparisons between the traditional and virtual learning —

	Traditional Learning	Virtual Learning
Information Sources	Teacher & Textbook	Various resources
Format of Information	Text	Text & Multimedia
Presentation Format	Linear	Hypermedia / Multi- media
Presentation Style	Face to face (F2F)	Multi-modal
Interaction For-	Synchronous	F2F, Synchronous & Asynchronous
Interaction Space	Time & Space Bound	Time & Space Free
Instructional Emphasis	Acquiring Knowledge	Building Knowledge
Objectives	Specific/predefined	General/evolving

The major paradigms currently in use in ALN and Virtual Studies

We incorporated the teaching and design considerations that Asynchronous Learning Networks had adopted as the standards for ALN teaching. We adopted most of these to suit our needs. Our model was an amalgam of traditional and ALN concepts -

Online materials that	Course Profiles, Assignments, Readings, Prob-
include	lems (theoretical & real), Interactive Learning
	Modules

Course management	Electronic submission, electronic grading, ac-
	cess to student results, Student's access to enrol-
	ment status
Interaction with stu-	E-mail, Online 'chat' applications, List servers,
dents	Message boards
Audio recordings	Downloadable from a server MP3 etc, CDs, Cas-
	settes
Video clips of lec-	VAL Tapes, Downloadable / streamed from a
tures	server

Delivery and time factor efficiencies

As part of a comparison of academic delivery commitment measured in terms of hours the 1999 version of the Bachelor of Music/Performing Arts as shown placed alongside the 2003 version is revealing. By redesigning the way in which we delivered the coursework we reduced the total equivalent hours from 746 (in 1999) to 348 (in 2003) without compromising the integrity of the course structure –

Year 1

Code	Unit	Contact	Weeks	Total Time	Credit Points
38401	Chief Practical Study 1	1	24	24	10
39401	Writing Techniques 1	2	12	24	2
39402	Writing Techniques 2	2	12	24	2
various	Musicianship 3	1	12	12	2
various	Musicianship 3	1	12	12	2
39413	History /Art Music	2	12	24	3
39030	History/Popular Music	2	12	24	3
various	Elective @ 6	6	12	72	18
39801	Small Ensemble l	1.5	12	18	3
39802	Small Ensemble 2	1.5	12	18	3

Year 2

Code	Unit	Contact	Weeks		Credit Points
38401	ChiefPractical Study 2	1	24	24	10
39401	Writing Techniques 3	2	12	24	2
39402	Writing Techniques 4	2	12	24	2
various	Musicianship 3	1	12	12	2
various	Musicianship 3	1	12	12	2
39413	StudiesinForm	2	12	24	3
39030	StudiesinForm	2	12	24	3
various	Elective@6	6	12	72	18
39801	SmallEnsemble 3	1.5	12	18	3
39802	SmallEnsemble4	1.5	12	18	3

252 48

Year 3

Code	Unit	Contact	Weeks	Total Time	Credit Points
38401	Chief Practical Study 2	1	24	24	10
39401	Writing Techniques 3	2	12	24	2
39402	Writing Techniques 4	2	12	24	2
various	Musicianship 3	1	12	12	2
various	Musicianship 3	1	12	12	2
39413	Studies in Form	2	12	24	3
39030	Studies in Form	2	12	24	3
various	Elective @ 6	6	12	72	18
39801	Small Ensemble 3	1.5	12	18	3
39802	Small Ensemble 4	1.5	12	18	3

252 48

Total Hours for the 3 years 756 hrs

The savings in contact hours have not been made by reducing content but rather by effective amalgamation of courses and year levels.

Year 1

Code	Unit	Contact	Weeks		Credit Points
38401	Chief Practical Study 1	1	24	24	12
39401	Writing Techniques l	1	12	12	3
39402	Writing Techniques 2	1	12	12	3
various	Musicianship 3	1	12	12	3
various	Musicianship 4	1	12	12	3
39413	History /Art Music	1	12	12	3
39030	History/Popular Music	1	12	12	3
various	Electives @ 4	4	12	48	12
39801	Ensemble I	1.5	12	18	3
39802	Ensemble 2	1.5	12	18	3

180 48

Year 2

Code	Unit	Contact	Weeks		Credit Points
38401	Chief Practical Study 2	1	24	24	12
various	Musicianship 5	1	12	12	3
various	Musicianship 6	1	12	12	3
39413	Studies in Form	1	12	12	6
39030	Studies in Form	1	12	12	6
various	Electives @ 4	All BM/PA students one class			12
39801	Ensemble 3	1	12	12	3
39802	Ensemble 4	1	12	12	3

96 48

Year 3

Code	Unit	Contact	Weeks	Total	Credit
				Time	Points
38401	Chief Practical Study 3	1	24	24	12
various	Musicianship 3	1	12	12	3
various	Musicianship 3	1	12	12	3

39413	Studies in Form	2&3 years students one6	
		class	
39030	Studies in Form	2&3 years students one6	
		class	
various	Electives @ 4	All BM/PA students12	
		one class	
39801	Ensemble S	1 12 12 3	
39802	Ensemble 6	1 12 12 3	

72 48

Total Hours for the 3 years

348 hrs

Undergraduate course delivery Methodologies

The evolution from singularly Face to Face delivery on-campus mirrored the delivery of the off-campus virtual model to the point that the two had become indistinguishable in terms of delivery format. This pedagogical change has not been imposed on the on-campus students but had been requested by body of students.

Year 1

Course	Code	Course Name	Semester	CP	Mode
MUSC	11236	Chief Practical Study 1	A+W	12	F2F
MUSC	11266	Writing Techniques 1	A	3	ISL/VCD
MUSC	11267	Writing Techniques 2	W	3	ISL/VCD
MUSC	10250	Musicianship 3	A	3	SBL/CAL
MUSC	10251	Musicianship 4	W	3	SBL/CAL
MUSC	10274	History/Art Music	W	3	Online/VCD
MUSC	10260	History/Popular Music	A	3	Online/VCD
MUSC	10325	Ensemble Studies 1	A	3	F2F
MUSC	10326	Ensemble Studies 2	W	3	F2F
Various	3	4 @ Electives	A/W	12	mixed

Year 2

Course Code	Course Name	Semester	CP	Mode
MUSC 12237	Chief Practical	A+W	12	F2F
	Study 2			
MUSC 10252	Musicianship 5	A	3	SBL/CAL
MUSC 10253	Musicianship 6	W	3	SBL/CAL
Various	Studies in Form:	A	6	Online/VCD
	(various)			
Various	Studies in Form:	W	6	Online/VCD
	(various)			
MUSC 10327	Ensemble Studies 3	A	3	F2F
MUSC 10328	Ensemble Studies 4	W	3	F2F
Various	4 @ Electives	A/W	12	mixed

Year 3

Course	Code	Course Name	Semester	CP	Mode
MUSC	12237	Chief Practica	A+W	12	F2F
		Study 2			
MUSC	10254	Musicianship 7	A	3	SBL/CAL
MUSC	10255	Musicianship 8	W	3	SBL/CAL
Various	;	Studies in Form	:A	6	On line/VCD
		(various)			
Various	;	Studies in Form	:W	6	On line/VCD
		(various)			
MUSC	10329	Ensemble Studies 3	A	3	F2F
MUSC	10328	Ensemble Studies 4	W	3	F2F
Various 4 @ Electives		A/W	12	mixed	

COMPARISON OF EXPECTATIONS FROM THE ORGANIZATION AND INDUSTRY PERSPECTIVE

The decision to create *The Virtual Conservatorium* was not a hasty one. We had been involved in the management and delivery of off-campus materials over the past decade and had a background in computer science and course development. This meant that *The Virtual Conservatorium* has had a lengthy incubation period.

As a result of this long planning period, a realistically planned financial and delivery program was designed and implemented. Nearly all of our targets were achieved on schedule and according to our strategic plan. The only variation that was not predicted was the actual cost of delivery for the undergraduate program. We had assumed a costing of \$3,600 per student and managed to deliver for approximately \$3,200 per student. This was partially due to the cost savings created by using some of the full-time CQCM staff teaching within the program. The

\$3,600 figure assumed maximum outsourcing of the practical and academic delivery of courses.

Another unpredicted outcome was the request by the oncampus Mackay students for the adoption of the virtual materials for two of the undergraduate courses. Writing Techniques 1 (Autumn) and Writing Techniques 2 (Winter) were to be delivered in two separate modes during 2003 in preparation for only virtual delivery in 2004. For the Mackay and Rockhampton students the courses were to be delivered via ISL whilst the offcampus students were to receive a specifically created series of VCDs and associated study guides. The assumption was that the virtual students may have felt as though they were getting a second-rate option. We were very conscious of this and created a comprehensive and attractive package for them. The opposite occurred. The Mackay and Rockhampton students requested access to the virtual VCD/study guide package in place of the scheduled lectures.

Further, the courses Musicianship 1, 3, 5 and 7 (Autumn and Spring/Summer) and Musicianship 2, 4, 6 and 8 (Winter and Spring/Summer) had a similar evolution. The On- campus version was also planned to be delivered via ISL whilst the virtual model utilized a CD-Rom software package with a CQCM navigation/study guide. Again, the on-campus students requested access to the same materials as the virtual students.

With these changes coming an unprecedented year before predicted, the distinction between on-campus study and virtual study was blurred. The only difference in study and lecture mode was the physical location in which the courses were undertaken. What we anticipated as a long term, possible evolution, actually occurred considerably faster than anticipated.

THE EXTENT TO WHICH THE PROBLEMS OF THE PROJECT WERE SOLVED AND THE PROJECT REACHED ITS GOALS

The Virtual Conservatorium serves as a working example of a speedy initiative, which placed the conservatorium in a satisfying location in relation to other conservatoria around the country. With the formal launch in July 2002, it was an exciting new venture that changed the nature of conservatoria in that it acknowledged that teaching and learning can take place in a range of settings using a range of new and interesting resources developed for the project by staff and allied services. The internet proved to be a useful medium for teaching and learning.

The project (*The Virtual Conservatorium*) provided new and effective access to students outside the normal access sphere. With additional funded places at undergraduate level (60) and an unlimited number of places at post graduate level *The Virtual Conservatorium* had the capacity to grow to a gross income achievement of \$1 m within the next three years (with 40 post graduate students) placing it alongside some of the more capable

and distinguished elements within the current larger conservatorium business.

The project also has the potential of providing, and to some degree had already achieved, a certain competitive edge given the fact that it was the first of this kind of program available in Australia and would certainly make other conservatoria rethink the way they operate. This already happened. Three like institutions requested support from in establishing similar designs and projects.

In a time of conservatoria cutbacks, reductions and high deficits it was indeed pleasing to see an entity within the industry that was reversing the trends in terms of growth and operation and at the same time making a significant contribution to the review and redevelopment of future practice. The key to future success would be maintaining an environment of innovation and creative thinking that would attract capable and forward thinking personnel and would keep already achieving members of staff in place and motivated.

'The Virtual Conservatorium was able to exist by not allowing itself to be boxed in by the mentality that in the arts, virtual education only means isolated, individual, personal computer centred education. The mass media portrayed this negative image that virtual and innovative technologies were synonymous with exclusive interaction with a computer. This image suited the Hollywood stereo-typecast scenario, but on the whole bore little resemblance to the impact of the overall possibilities of the virtual landscape.

The assessment instruments were utilised by all four undergraduate programs for 2 years. Progressive versions have been created in response to staffing requirements. The response from staff using this has been overwhelmingly positive.

From June 2002, the Faculty of Education and Creative Arts underwent a Quality Assurance audit and assessment. Fundamental issues resulting from this process would be identified and

strategies adopted to rectify problems. *The Virtual Conservato-rium* was governed by all faculty Quality Assurance procedures. In September 2002, The Faculty of Education and Creative Arts (which incorporates CQCM) received its ISO 9001: 2000 accreditation. CQCM (November 2003) was externally audited and received a positive outcome with regard to processes and mechanisms.

The expected impacts on the organization/industry

The Virtual Conservatorium project represented a bold and well needed tertiary music initiative that provided a range of options for undergraduate and post graduate students. The project team spent considerable time and effort developing the framework for delivery and management.

In Distance Education models, the aspects of *The Virtual Conservatorium's* support network of 'eCarers' was unique. Even in traditional on-campus models, pastoral care was generally the realm of chaplaincy and only utilised by students who actively pursued this action. *The Virtual Conservatorium* engaged all students on a regular basis, the rationale behind this was to identify and treat any concerns before they emerged as problems.

The notion of a single examiner for all CPS performance examinations had a financial implication but it has been noted the quality assurance gained surpassed this as a major concern. These examiner's visits allowed the family of the student, the staff member and if required the community, the ability to directly and personally access the manager of *The Virtual Conservatorium*.

The online delivery of some academic courses mimicked the pedagogical concepts of ALNs. *The Virtual Conservatorium* used forms of Asynchronous communication such as email but further developed this to include synchronous communication such as ISL.

Software based delivery (CAL — computer based learning) had similarities to distance education packages currently in use in other Australian universities. The use of CQCM generated study guides also was a standard distance delivery tool.

Even though *The Virtual Conservatorium* had enrolments from on-campus students and delivered some units similarly, the differences were too great to refer to it as "on-campus".

The product outlined

'The Virtual Conservatorium was an innovative mix of traditional and new pedagogical approaches to the process of arts education with a modern structured entrepreneurial business strategy.

The Virtual Conservatorium existed in a unique pedagogical location. It was neither traditional F2F nor Synchronous nor did it fit within the Asynchronous Learning Network models. It was not a truly distance model as regular F2F tuition is given locally. The title "virtual" education, an amalgam of the four delivery models stated above, was the only suitable title for the deliver format of *The Virtual Conservatorium*.

The Virtual Conservatorium (eConservatorium) offered two electronic based products from mid-2002 and beyond. The MAA online became available from mid-2002. Features included all seven courses being available electronically and supported by an electronic tutor; an electronic administrator; and an electronic carer. The product had been piloted and evaluated by post graduate students as positive and suggestions for improvement have been incorporated into the new design. Access to the courses was via *The Virtual Conservatorium portal*. Students were located in four states and two territories throughout Australia.

The eBachelor of Music/Performing Arts became available from early 2003. Most of the program was available on line or with the aid of commercially developed software. Chief Practical

Study and Ensemble courses were taken with approved Master Teachers and Ensembles anywhere in Queensland from the outset — and shortly from anywhere in the world – it was planned.

Both programs represented an innovative and exciting way forward for the *Central Queensland Conservatorium of Music* placing the institution firmly in the new economy and in the adventurous and stimulating realm of eBusiness.

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