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School of Art 5 Year Computing Plan

Mission Statement

The School of Art will use computer technologies to enhance the quality and effectiveness of teaching, research and administration. Computing technologies will be utilised to move the College of Fine Arts to the forefront of Fine Art Institutions both in Australia and Internationally.

Policy

The Five Year Computing Plan recognises that the Staff and Students and University Community are the fundamental resource of the School of Art. The role of computers within the School of Art is to support and enhance the variety of creative exploration, initiatives and skills that each person may bring to the School.

Priority Initiatives

- Communications & Information Resources - Networking
- Teaching & Administration / Curriculum development
- Growth in Undergraduate Computing Facilities
- Computer Systems & Training
- Research Environment
- Director of Development
- Flow Through of Undergraduate into Research Culture
- Relation to Multimedia Centre
- Policy
- Staffing
- Staff Development and Training
- Fundraising
- Profile
- Communication and Information
- External Services / World Wide Web Courses

Introduction

One of the benefits of learning about computing in the context of an art school relates to the integration of visual and audio literacy across a series of media. Understanding the contemporary practice, technologies and histories of Video Art, Film Art, Sound Art, Performance Art, Sculpture, Drawing, Printmaking, Photomedia, Painting, and Design gives the student exploring the potentials of multi-media computing a creative edge both in the art world and in the contemporary work environment. At COFA, students of the School of Art develop an individual approach to their art practice through their knowledge of aesthetics, the history of art, and the creative exploration of the qualities inherent to a number of technologies. They not only learn how to use these technologies intelligently, they also learn how to push the boundaries of their fields, exploring the creative potentials of these communication vehicles, as well as suggesting new experimental approaches. It is within this broad context that computers flourish as creative tools at COFA. An expansive definition of visual and sonic literacy is essential to the quality of future media exploration. We must insure that this particular quality of education, already currently in evidence at COFA, is optimised through the scheduling of classes which bridge the practical and technical with the aesthetic, experimental and historic. As society changes at a ever quickening pace, it will be those with advanced intuitive vision, a knowledge of technologies and their potential as well as a mind set which allows for continuous growth and rapid change, that will shape and define the future. In this light we offer the following proposal for a 5 year plan related to computing at COFA in the school of art.

About this Report

This document aims to present strategies that can be adopted through a Five Year Computing Plan within the School of Art and determines possible requirements for implementing such. It is a goal that these strategies as well as implementation in regard to computer technologies continually develops and evolves within the whole of the College environment. This report is attempting to integrate possible strategies that concern both the College of Fine Art and the School of Art. The development of policies over the next five years should include aims and objectives which place an emphasis on 'people' policies rather than just on hardware. The emphasis on people will allow COFA the flexibility to make computer purchases based on the changing needs of students, researchers and staff as well as the rapid developments in computing technologies.

Communications & Information Resources

Aim:

To integrate all forms of electronic communication and information resources, including data, voice, image, sound and video into a simple logical network that is accessible to all members of the School of Art.

Target Environment

- a flexible network which reaches all departments and administration
- staff are supported & encouraged in acquiring networking expertise
- effective use of networking facilities
- a digital backbone with large capacity for multiple protocols, including image & video
- higher profile of school with international communication through internet & email
- admin systems provide user-friendly data entry, query & download to authorised users
- network access to COFA library databases and national & international databases
- connection to technical staff facilitates ease of communication
- computer based auditing, lending of tools and equipment as well as maintenance across the school
- ongoing shift from centralised to distributed network model
- time allowances for staff development related to internet skills

Outcomes

- policy of networking for staff & students
- effective communication between all members of School
- creative use of networking will enhance the school's reputation as a provider of high quality education
- national & international promotion of School of Art on the Internet
- enhanced teaching environment and research skills
- easier access to information and resources for all members of School
- efficient management of School
- improved staff-student communications
- adding value to information resources through larger pool of users

Considerations

- evaluate use of networking and ensure restrictions on commercial use/costs
- provide sufficient networking facilities for all students
- develop adequate support & training of network, internet and email for staff & students
- security levels for networking
- cost recovery, upgrading, maintenance
- alternative network systems

Possible Implementations

- Academic Position FT Communications Computing Co-ordinator (1996)

Teaching & Administration

Aim:

To utilise computing systems effectively and efficiently in providing high quality undergraduate and post graduate teaching and administrative systems which support the academic environment.

Target Environment

- the school integrates computing into teaching & learning wherever possible
- time allowances for staff development
- staff are supported & encouraged to acquire computing expertise
- computing is used effectively in teaching, learning and administration
- the school provides the necessary infrastructure to facilitate the broad use of computing
- higher profile of school acknowledged for computing skills of students & staff
- admin systems provide user-friendly data entry, query & download to authorised users
- admin systems provide efficient & economic management of resources

Outcomes

- policy of computing level for undergraduates & postgraduates
- policy of literacy levels for staff
- students and staff utilise learning, teaching and research opportunities that computing offers
- creative use of computing will enhance the school's reputation as a provider of high quality education
- better prepared graduates
- improved staff support and teaching environment
- easier access to essential data for admin management
- better flowthrough from undergraduate to postgraduate

Considerations

- evaluate use of computing to ensure sound pedagogical purpose in each area of teaching
- provide sufficient computing facilities for all students
- develop adequate support & training of computing facilities
- security levels for access to admin data
- planned transition from old admin systems to new without abandoning current effective functions

Possible Implementations

- Academic Position FT Undergraduate Computing Co-ordinator (1996)
- Academic Position FT Post Graduate & Staff Computing Co-ordinator (1996)

Growth in Undergraduate Computing Facilities

Aim:

To develop the computer related facilities as they apply to such areas as Print making, Sculpture, Painting, Jewelry and Drawing, as well as continued enhancement of the facilities in Time Based Arts and Photomedia.

Target Environment

- develop computer based courses which compliment sculptural practice
- develop crossover curriculum between digital sound and sculpture
- develop curriculum which explores 3d modelling, fabrication processes, visualisation, interface design
- develop curriculum which explores painting and print making related computer collage
- develop curriculum which explores computer based drawing
- develop curriculum which facilitates the design of jewellery
- develop facilities which relate to contemporary art and industry practice
- facilitate cross-pollination of skill bases
- establish a digital work station in sculpture
- establish a digital audio undergraduate lab
- establish a digital video undergraduate lab
- enhance 3D production facilities at COFA

Outcomes

- enhanced mutually beneficial crossover between disciplines
- advanced development of contemporary computer based practice in all fields offered at COFA
- enhanced visualisation skills for team based projects

Considerations

- potential need for additional computer facilities
- the need for additional qualified staff
- re-training of interested current staff

Possible Implementations

- define a curriculum which can be accessed from a number of disciplines

Computer Systems & Training

Aim:

To create an environment in which computing is highly valued as a tool for teaching, learning, research and administration as well as creating an educational atmosphere that is strongly supported by appropriate computer systems and training.

Target Environment

- computing facilities & access for all
- support for people with disabilities
- coordinated policy for hardware/software purchasing
- basic & advanced computing workshops
- wide range of computing facilities that can be utilised by all departments
- progressive upgrading and acquisition of systems appropriate to needs
- computing systems that encourage advanced training levels of users
- close links with external hi-end computing facilities & industry
- hi-profile industry training courses
- means for ongoing curriculum development
- more efficient use of computing systems to service a widening pool of users

Outcomes

- policy of hardware & software acquisition
- policy on training for staff
- creative use of computing systems will enhance the schools reputation as a provider of high quality education
- long term cost savings
- enhanced investment potentials
- higher level of computing skills for staff & students

Considerations

- closely evaluate investment in high cost technologies & possible alternative strategies
- move toward leasing all facilities
- provide computing systems which can meet the demands of artists
- develop effective training programs
- define security levels for various levels of users

Possible Implementations

- Academic Position FT Undergraduate Computing Co-ordinator (1996)
- Academic Position FT Post Graduate & Staff Computing Co-ordinator (1996)

Research Environment

Aim:

To utilise computing systems in the development of fine art research which is at the forefront of art institutions. To explore systems which relate directly to the expressive edge of emergent communication industries.

Target Environment

- fully utilise computing facilities for all types of research
- coordinated policy & support for funding research grants and sponsorship
- coordinated computing policy for research staff & students
- basic & advanced computing workshops for all researchers
- use of industry computing facilities/products with close links to industry for latest developments
- define close links with hi-end computing facilities at other institutions
- computing systems that encourage advanced training levels of users
- enhanced profile of researchers with internet and other documentation of research activities
- applied research in industry/institutions
- development of electronic research publication (CD Rom or WWW)

Outcomes

- policy on computing & research
- links with other hi-end facilities may eliminate need for very large hardware, software, training and maintenance costs
- more efficient use of computing systems for research
- creative use of computing systems will enhance the school's reputation for research which could be applied in a broad number of industrial and institutional settings
- enhanced investment potentials through research activities
- higher level of researching skills for staff & students

Considerations

- evaluate benefits/disadvantage of using other hi-end facilities
- provide computing systems which can meet the demands of research artists
- development of mutually beneficial links between industry, other institutions and COFA
- allow for an environment which both supports individual practice and links to industry

Possible Implementations

- creation of Academic Position FT Research Co-ordinator / Director of Computing Development (1996)
- renaissance Team Projects headed by Director of Development
- projects which bridge any School of Art discipline, Design, Kensington programmers and legal practitioners
- team Projects which bridge a series of institutions both nationally and internationally

Director of Computing Development

Aim

To establish a position with a clear brief dedicated to research development.

Target Environment

- coordinates industry relations at COFA
- coordinates research projects - renaissance team model
- liases with industry
- writes grants - ARC, Small ARC, internal and others
- facilitates connections to other facilities, institutions and facilities
- facilitates cooperation with Kensington on high level projects
- fund raises
- liases with staff and students
- liases with computer systems Coordinator
- presents high end workshops, advises researchers and staff
- explores potential growth areas
- liases with Multi Media Unit Coordinator
- Chairs computing committee

Outcomes

- develops outstanding research culture
- brings resources into the College
- acts as a bridge to other institutions
- builds COFA research reputation
- helps to facilitate COFA corporate plan focusing on Research

Considerations

- works toward self funding position
- should be at least Associate Professor Level

Flow Through of Undergraduate into Research Culture

Aim:

To develop a program which flows from the undergraduate environment to an advanced postgraduate research environment. To develop team based projects which are mutually beneficial to all involved including advanced undergraduates, postgraduates and industry.

Target Environment

- quality undergraduate education feeds the postgraduate environment
- advanced students work with postgraduate students on high end projects as research projects
- develop Renaissance Teams
- students work on high end teams coordinated by a designated coordinator
- becomes a 3rd year class alternative
- practice in real world team situation

Outcomes

- creates a mutually beneficial working environment for postgraduates, undergraduates and industry (where appropriate)

Considerations

- appropriate coordination will assure growth
- teams may bridge both campuses

Possible Implementations

- groups facilitated by research coordinator

Relation to External Multimedia Unit

Aim:

To strengthen high end teaching and to provide a potential growth area outside of the skill base of the current staff.

Target Environment

- facilitate training programs for staff development (keep places open specifically for this purpose)
- augment the attendance of honours students, postgrads, and PHD students in Multimedia Unit courses

Outcomes

- growth in staff knowledge
- growth in the quality of the curriculum
- enhanced relation to industry (other members of class)
- get high level training at no cost to the school of art

Considerations

- specific places must be maintained for this process - define an appropriate number

Possible Implementations

- enhanced publication and scheduling system
- on campus coordinator for staff / student scheduling for Multimedia Centre

Policy - University Wide Goals

Aim:

To augment communication between staff and students. To augment the research environment and productivity in general. To enhance the use of time off campus. To augment communication with coordinators and technical officers. To augment communication with those seeking information about courses.

Networking

Target Environment

- all offices and labs should be networked for the easy exchange of files and access to Email.
- Email should be made available for everyone by choice via "Eudora" Software.
- technical staff offices should be connected to greater email environment.
- move toward an environment where there is one computer in every office.
- provide home slip connections to internet for Senior Lectures, Associate professors, Honour Students, Post Graduates and PHD students

Outcomes

- enhance communication on all levels
- alleviate overlaps in working tasks
- opens up access to COFA computers by using the students' own systems
- distributes use off for College of Fine Art computers

Considerations

- relatively small amount to pay in terms of giving Post Grads a place to work as opposed to building new spaces and working facilities

Possible Implementations

- connections on an application basis

Access

Aim:

To provide a safe ,open working environemt with secure facilities.. To maximise access by implementing a key code card for access to the lab after hours

Target Environment

- 24 hour access
- 7 days a week

Outcomes

- enhanced productivity
- greater access to equipment for larger student body
- longer access to equipment for labour intensive projects
- more time outside of class for access

Considerations

- security system cost
- extra personnel
- It is common practice in other universities to have the lab active throughout the 24 hours of a day.
- Often the most dedicated computer users start work at 11pm, working well into the morning.

Possible Implementations

- Such a system could register who enters and when.
- other security measure could be implemented - securing machines

Computer Literacy

Computer Literacy and Skill Levels for Undergraduates

Aim:

An enhanced quality of education.

Target Environment

- Beginning with the new BFA in 1996, we would like to see a basic computing workshop for all undergraduate students at COFA. (This will be in place for students of the School of Art). This course should familiarise students with the basic use of Apple Computers. An introduction to the various potentials of the computer as an experimental expressive tool should also be covered. Students should learn about how computers work, how to work with various programs, as well as how to save and store computer based artwork. The class should include an introduction to computer based collage, introductory notions related to animation, multimedia computing and interactivity. Aspects of networking, file sharing, and the basic computing skills needed to work in the computer laboratory should also be covered. The student should leave the class with a basic understanding of the potentials of working creatively with computers, as well as the technical skill to facilitate such creation.

Outcome

- enhanced flow through to post graduate realm

Considerations

- additional staff may need to be employed
- additional facilities may need to be attained or accessed via better scheduling

Possible Implementations

- mandatory introductory classes as described above

Computer Literacy and Skill Levels for Research Honours, MFA, and PHD

Aim

To assemble an advanced technical staff with knowledge of Mac, and SGI systems.

To secure staff members with a knowledge of programming in C, Unix, Lingo, VRML, HTML, and Hypertalk, which could be made available to students and researchers at scheduled times.

Target Environment

- It is believed that all postgraduate students should have at least a basic level of computing skill, (as outlined above for the undergraduate student). Students whose research involves computer based skills should show a high degree of computing skill (either through portfolio or academic history upon entry), and a propensity toward self directed acquisition of new skills. This could be outlined in a statement to the applicant. The school should provide technical assistance related to basic research needs. If this student needs very specific, high level assistance for their research i.e. a programmer, this should be outlined in their research proposal, and considered before admission or through proposals submitted during their course of research (after admittance).

Outcomes

- enhanced postgraduate computing environment
- enhanced research projects

Considerations

- additional staff may need to be hired
- re-skilling of current technical staff
- coordination with external resources needs to be augmented

Possible Implementations

- hiring of appropriate coordinators
- develop advanced application procedures

Computer Literacy and Skill Levels for Staff

Aim

To develop an advanced computing environment which crosses all disciplines at COFA.

- Currently there is no policy related to the acquisition of computer skills for Staff at COFA. It is believed that all staff should have at least a basic level of computing skill, as outlined above for the undergraduate student. This means that staff who have been at COFA for some time, who do not have a basic knowledge of computing, should take a short course to come up to speed with the current teaching environment. Lecturers both attending and running these workshops would get time allowances off their normal teaching hours. Specific Job descriptions should be made for the hiring of future staff in relation to skill level, programming abilities, level and quality of research, and fund raising abilities. Specific technical staff should be sought that have programming skills. Technical staff should also be paid an appropriate wage in relation to skill level and have an appropriate work load in relation to their duties. Short courses should be made available to staff for the acquisition of new skills even if this means bringing in people from outside of the university. courses should run both during the break as well as during the semester.

Target Environment

- all staff at COFA

Outcomes

- advanced quality of education
- advanced quality of staff research

Considerations

- appropriate staffing and scheduling of courses and workshops which bring staff up to date with current technology
- provide technical classes each semester
- provide lecturer based classes for research related development

Possible Implementations

- run short courses each semester
- coordinate access to the Multimedia Unit

Staffing

Aim:

Provide a rich environment for both undergraduate and postgraduate programs as related to computer based technologies.

Target Environment

- augment technical proficiency of staff
- hire appropriately skilled part time staff

Outcomes

- enhanced educational environment

Considerations

- cost of staffing
- scheduling of staff availability
- develop brief which allows staff to have appropriate pay for skill provided

Possible Implementations

- hire specific new staff
- retrain staff who are so inclined
- seek special funding for high end programmers

Visiting Artist Series

Aim

To develop a national and international computer based visiting artist program and related seminar.

Target Environment

- provide a context from which to view current research
- establish connections to the larger art world
- establish connections to other institutions

Outcomes

- development and enhancement of national and international profile
- allows real world contact to artists working in the field

Considerations

- cost of program

Possible Implementations

- possible exchange program for artists
- possible funding from external sources in exchange for access to equipment

Fundraising

Aim

To create a institutional structure which has a specific brief toward fundraising.

Target Environment

- Seek Funding from National sources
- Seek sponsorship of major hardware and software concerns
- Seek internal funds through such grants as Small ARC and Large ARC
- Seek funds through new computer based teaching schemes
- Seek funds based on quality of education and planning

Outcomes

- meet as many of the defined aims as possible
- enhanced quality of education
- build a reputation for quality and future support
- build an international reputation for research support

Considerations and Possible Implementations

- create specific positions with a brief toward fundraising
 - Director of Development
 - Coordinator of Academic Computing
 - Coordinator of Undergraduate Computing
 - Coordinator of Research Computing
 - Area Coordinators

Development of a Technological Profile

Aim:

To build a profile which relates to the quality of education and research at COFA in terms of Computer Related practice.

Target Environment

- the audience of the World Wide Web - potential 30 million
- create an international database for mailings
- facilitate exchanges with other institutions both nationally and internationally
- facilitate computer related conferences
- facilitate Multicultural outreach programs
- develop advanced publishing schemes (CD Rom etc) related to curriculum and research environment
- develop research newsletter
- develop appropriate brochures

Outcomes

- enhanced national and international visibility
- greater ability to obtain funds and sponsorship and grants

Considerations

- costs of implementations

Possible Implementations

- director of development lead publication development
- make this an assignment for 3 year class

Networked Teaching

Aim

To provide national and international education programs over the World Wide Web.

Target Environment

- Distance and home education have had many developments internationally in the last ten to twenty years. The number of free to air broadcasts with supplementary printed material have increased dramatically. Such projects as Open University in the UK led to other such courses in the United States and many other countries including Australia. They have proved to be extremely popular. This has led to a radical rethink about the nature of tertiary education. The obvious advantages to people unable to travel or unable to study full time have been recognised. These people may be seeking career opportunities or new skills to give them an edge in their business. People who are physically incapacitated are likely to be an interested group due to their high literacy level in computing. Also a new type of student has emerged or re-emerged as someone who studies for personal development, using this form of education as a kind of recreation. Outside of Australia the number and variety of institutions involving themselves in this form of education is staggering considering the short time frame involved. The number of potential students is expected to double every month over the next year then double every six months for the next two years *1. So should we become involved, what kind of courses could we run and how should we run them?

Outcomes

- Getting in on the ground floor gives an major advantage in profile. We have or are planning to have all the necessary equipment and a great deal of the expertise already. The kind of courses we should run are obviously an extension of our areas of expertise. We are an Art school and are already running courses in digital imaging and multi media. We should run these and could do so in a relatively short time frame. (I am leaving Art Theory out of this discussion although Net users have bemoaned the lack of cultural theory available on the Net for some time) We should also develop courses in web design and HTML scripting and then in what I consider to be the most important area of web interactivity. This area is only beginning to develop. Macro Media Director (one of the major pieces of authoring software used for developing interactives) will soon be available over the Net making interactivity possible on line. It will take some time to develop its potential as the bandwidth is not at present sufficient to permit fast and fluid interactivity. However in my and many other people's opinion it will have a profound impact. The time frame for its development seems to be over the next five years. We are perfectly placed with all the teaching and aesthetic sensibilities to have a major impact. It would seem there is no better course to run over the Net than the Net art forms themselves.

- The international nature of digital culture gives us scope to develop truly international courses. Australia has a good reputation in many Asian nations for its multi media products. I am thinking particularly of Taiwan where recent trade missions have sold record numbers of these promoted there products. Funding for this program I would assume would be not difficult in the current climate.

Possible Implementations

- At first very similar courses to those already existing in multi-media and digital imaging could be run. Considerable time would need to be devoted to designing the material into projects. Recorded sequences showing step by step instructions can be down loaded so that the student has an exact record of how to achieve a result. These take time to develop and should not be rushed as they need to be clear accurate and consistent. Material from instruction books needs to be cleared with the copyright holder. Finally a pilot program should be undertaken to iron out any confusing points. Once the material has been developed, sufficient staff need to be dedicated to looking after the technical and the educational needs of the students. For example each student will need to contact a lecturer at particular points in the course either by E mail, voice mail, by phone or in person where possible. This needs to be thoroughly researched. A programmer and/or technical officer would need to be employed to back up files and store down loaded files.