

**KAPI'OLANI COMMUNITY COLLEGE  
PROGRAM REVIEW**

**NEW MEDIA ARTS  
2006**

Based on data for Fall 2003 through Spring 2006

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## **Mission Statement 2003-2010**

Approved October 7, 2002 by KCC Faculty Senate

Kapi'olani Community College...

- is a gathering place where Hawai'i's cultural diversity is celebrated, championed and reflected in the students, faculty, staff, administration and curriculum.
- is a nurturing workplace of choice for strong and caring faculty, staff, and administrators committed to a shared vision and set of values.
- strives to be the first choice for education and training for Hawai'i's people.
- provides open access, and promotes students' progress, learning and success with low tuition and high quality instructional programs, student development and support services, and selective areas of excellence and emphasis.
- prepares students to meet rigorous baccalaureate requirements and personal enrichment goals by offering a high quality liberal arts program.
- prepares students to meet rigorous employment and career standards by offering 21st century career programs.
- prepares students for lives of ethical, responsible community involvement by offering opportunities for increased civic engagement.
- leads locally, nationally and internationally in the development of integrated international education through global collaborations.
- uses human, physical, technological and financial resources effectively and efficiently to achieve ambitious educational goals.
- builds partnerships within the University and with other educational, governmental, business, and non-profit organizations to support improved learning from preschool through college and lifelong.
- uses cycles of qualitative and quantitative assessment to document degrees of progress in achieving college goals and objectives.

## **Part I. Executive Summary of Program Status**

This is the first report of the newly developed three-year program review. There are no recommendations from previous reports to discuss at this time.

## **Part II. Program Description**

### **DESCRIPTION AND GOALS**

The New Media Arts (NMA) Program is part of the Arts and Humanities Department. The NMA Program has four full-time faculty members, one lab manager, a half-time counselor and two to four lecturers per semester. The New Media Arts Program is a select program and has an admission process. The Associate in Science in New Media Arts Animation Specialization requires 78 credits; the Associate in Science in New Media Arts Interface Design Specialization requires 78 credits; and the Associate in Science in New Media Arts Information Architecture Specialization requires 79 credits. The Information Architecture Specialization is not active and at present has no majors.

### **GOALS**

1. The New Media Arts program at Kapi'olani Community College prepares students for professional work in the fields of interface design, computer animation, and the converging industries that require advanced skills in multimedia design and production.
2. The program serves professionals updating and refining their job skills and students preparing for a career in digital design or production. The program integrates classroom instruction with hands-on production skills in a learning environment that encourages the collaborative process inherent in professional multimedia design and production.

### **HISTORY**

The very first NMA courses were approved as experimental courses in Fall 1997. Courses were taught by one full-time instructor, one half-time instructor and several lecturers. The course offerings represented a sampling of several trends in multimedia of that time and led to an Associate in Technical Studies (ATS) degree. Students completing the ATS degree selected courses for their degree with the advice of an ATS advisor.

Three Associate in Science (AS) degrees were developed in Fall 2000 with specific course requirements. The programmatic goal in shifting to the AS degree instead of the loosely structured ATS degree was to provide well considered student learning outcomes for NMA students and to predict the need for courses and resources.

In Summer 2001, the Board of Regents approved the following degrees:

- Associate in Science in New Media Arts Motion Graphic Design Specialization
- Associate in Science in New Media Arts Graphical Interface Design Specialization
- Associate in Science in New Media Arts Information Architecture Specialization

In Spring 2002 minor edits were made to the three degrees. The Motion Graphic Design was renamed Animation and the Graphical Interface Design degree was renamed Interface Design.

In Fall 2002, the first three majors enrolled in the New Media Arts Program and FTE faculty had grown from 1.5 to 3.5. During that same semester, based on advice from the NMA Advisory Board, faculty recommendations, industry assessment, and comments from students, the NMA AS degrees' curricula were updated. Additional students learning outcomes needed to be developed and the courses' curricula reviewed and revised. The scope and depth of the degrees were impacted by the lack of upper-level animation or interface design programs at the bachelor level in the State. NMA AS degrees were developed with a maximum number of credits. The new curriculum was submitted for approval in Spring 2003 and introduced in Fall 2003 through Spring 2004.

Staffing New Media Arts courses remains a concern. In Fall 2003 the half-time NMA faculty member relocated to Hawai'i Community College. In both Spring 2003 and Spring 2004, an effort was made to hire a second full-time Interface Design instructor. Both times the search was unsuccessful. The best qualified applicants that fulfilled the demands of the position were unwilling to continue with the application process based on the salary range made available for the position. Several applicants that completed the lecturer application process did not have the necessary portfolios and skills to adequately fulfill it and therefore no offer was made to them. After two unsuccessful recruitments, a viable Interface Design candidate was identified, recruited and hired for Fall 2005.

From Fall 2003 to Spring 2006, seven to nine NMA courses per semester were staffed by lecturers. Each semester since Fall 2003, one to four courses were not offered because qualified lecturers could not be found. It is difficult to find lecturers with all of the following requisite qualifications: an appropriate academic degree, industry level experience, teaching skills, and willingness to work for lecturer pay. From Fall 2003 to Spring 2006 eleven different lecturers taught NMA courses. This lack of consistency made it difficult to predictably offer the program courses. A request to designate NMA as a high demand discipline for purposes of salary placement has been made. Approval of the request would allow the college to recruit and retain FT and PT faculty at salaries more aligned with industry standards

The following charts summarize staffing and courses offered from Fall 2003 through Fall 2005:

<b>Staffing FT and Lecturers</b>	<b>F 2003</b>	<b>S 2004</b>	<b>F 2004</b>	<b>S 2005</b>	<b>F 2005</b>	<b>Totals Courses</b>
NMA Faculty	9	8	8	10	10	45
Art Faculty	1	0	1	0	1	3
Lecturers	8	8	9	7	7	39

<b>NMA Courses</b>	<b>F 2003</b>	<b>S 2004</b>	<b>F 2004</b>	<b>S 2005</b>	<b>F 2005</b>	<b>Totals Courses</b>
Courses required	18	20	19	20	19	96
Courses offered	18	16	18	17	18	87
Course cancellations due to lack of lecturers availability	0	-4	-1	-3	-1	-8

Although the goal of providing in-depth AS degrees is worthwhile, the workload for New Media Arts students has proven difficult. Students complain of an academic workload that is too heavy to manage. Many NMA students are non-traditional having full-time or part-time jobs and family responsibilities; others are foreign students for whom English is a second language.

Based on both staffing and student workload concerns, a reduction and more concentrated focus for the program is under review. Additionally a bachelor degree is in development through the Academy for Creative Media (ACM) at the University of Hawai'i at Manoa reducing the need for NMA to offer as many upper level Animation topics. NMA Animation students will be able to articulate NMA courses toward a bachelor degree from ACM in Computer Animation and Game Design.

## **ADMISSIONS AND DEGREE REQUIREMENTS**

### **ADMISSION REQUIREMENTS**

Students interested in majoring in New Media Arts must go through a selection process. Each Spring applicants submit a portfolio containing samples from required prerequisite courses and a written statement. Based on these portfolio submissions, students are ranked and the first fifteen per specialization are accepted into the program for the following Fall semester.

**DEGREE REQUIREMENTS: ANIMATION SPECIALIZATION (Total of 78 credits)**

<b>SEMESTER ONE: Prerequisites (9 credits)</b>	<b>SEMESTER TWO: Prerequisites (9 credits)</b>
ART 101 Introduction to the Visual Arts	ART 112 Introduction to Digital Art
ART 113 Introduction to Drawing	ART 107 Introduction to Photography
ART 115 Introduction to Design	ART 106 Introduction to Sculpture <b>or</b> ART 123 Introduction to Painting

**AFTER ACCEPTANCE INTO THE ANIMATION SPECIALIZATION**

<b>SEMESTER ONE: FALL (15 credits)</b>	<b>SEMESTER TWO: SPRING (15 credits)</b>
ART 202 Digital Imaging	ART 226 3D Computer Graphics II
ART 126 3D Computer Graphics I	ART 156 Digital Painting
ART 212 Digital Animation	ART 157 Film Analysis & Storytelling
ART 214 Life Drawing	ART 158 History of Animation
ENG 100 Expository Writing <b>or</b> ENG 160 Business and Technical Writing <b>or</b> ESL 100 Expository Writing	MATH 100 Survey of Mathematics <b>or</b> PHIL 110 Introduction to Logic

<b>SEMESTER THREE: FALL (15 credits)</b>	<b>SEMESTER FOUR: SPRING (15 credits)</b>
ART 246 3D Computer Graphics III	ART 256 Compositing
ART 247 Lighting and Rendering	ART 259 Gaming & Realtime Computer Graphics
ART 248 Digital Post-Production	ART 296 Demo Reel Development
ART 294 New Media Art Practicum <b>or</b> ART 293V New Media Art Internship	ART 294 New Media Art Practicum <b>or</b> ART 293V New Media Art Internship
ANTH 200 Cultural Anthropology <b>or</b> PSY 100 Survey of Psychology	KCC AS/NS AS Natural Sciences Elective (100 level or higher)

Note: ART 293V Interface Design and/or ART 294 Practicum for a total of six credits.

**DEGREE REQUIREMENTS: INTERFACE DESIGN SPECIALIZATION (Total of 78 credits)**

<b>SEMESTER ONE: Prerequisites (9 credits)</b>	<b>SEMESTER TWO: Prerequisites (9 credits)</b>
ART 101 Introduction to the Visual Arts	ART 112 Introduction to Digital Art
ART 113 Introduction to Drawing	ART 107 Introduction to Photography
ART 115 Introduction to Design	<i>(Select one)</i> ENG 100 Expository Writing <b>or</b> ENG 160 Business and Technical Writing <b>or</b> ESL 100 Expository Writing

**AFTER ACCEPTANCE INTO THE INTERFACE DESIGN SPECIALIZATION**

<b>SEMESTER ONE: FALL</b> (15 credits)	<b>SEMESTER TWO: SPRING</b> (15 credits)
ART 125 Introduction to Graphic Design	ART 229 Interface Design I
ART 127 Graphic Symbolism	ART 128 Interface Programming I
ART 159 History of Communication Design	ART 155 Information Architecture
ART 266 Typography	ART 202 Digital Imaging
<i>(Select one)</i> ANTH 200 Cultural Anthropology <b>or</b> PSY 100 Survey of Psychology	KCC AS/NS AS Natural Sciences Elective (100 level or higher)

<b>SEMESTER THREE: FALL</b> (15 credits)	<b>SEMESTER FOUR: SPRING</b> (15 credits)
ART 249 Interface Design II	ART 129 Corporate Identity
ART 257 Motion Graphic Design	ART 222 Digital Multimedia
ART 258 Interface Programming I	ART 294 New Media Arts Practicum <b>or</b> ART 293V New Media Arts Internship
ART 294 New Media Arts Practicum <b>or</b> ART 293V New Media Arts Internship	ART 295 Design Portfolio
<i>(Select one)</i> MATH 100 Survey of Mathematics <b>or</b> PHIL 110 Introduction to Logic	MKT 185 E-Commerce Marketing

Note: ART 293V Interface Design and/or ART 294 Practicum for a total of six credits.

**NEW MEDIA ARTS FACULTY – Full-Time**

**Teri Durland**, AB in Psychology, Stanford University, half-time Counselor

**Chris Gargiulo**, MFA in Design and Technology, Parsons School of Design, Instructor in Interface Design

**Jan Hathaway**, MFA in Printmaking and Photography, University of Alabama, Instructor in Interface Design and Program Coordinator

**Sharon Sussman**, MA in Computer Art, San Jose State University, Instructor in Animation

**Joseph Tremonti**, MFA in Electronic Visualization, University of Illinois at Chicago, Instructor in Animation

**ART FACULTY – Full-Time**

**Elizabeth Nakoa**, MFA in Printmaking, Colorado State University, Instructor teaching one NMA course

**NEW MEDIA ARTS FACULTY – Current Lecturers**

**Ailed E. Garcia-Saavedra**, MFA in Multi-media, San Diego State University

**Karen Jones**, BFA in Graphic Design, University of Hawai'i at Manoa

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**NEW MEDIA ARTS ADVISORY BOARD**  
**Fall 2005 – Spring 2006**

<b>Community Representatives</b>	
<b>Tom Brislin</b> , Academy for Creative Media University of Hawai'i at Manoa	<b>Sithiporn Keller</b> , Revacomm
<b>Chuck Boller</b> , Hawai'i International Film Festival	<b>Arne Knudsen</b> , Giddymachine
<b>Ray Carbullido</b> , Madskill Productions	<b>Joe Mastowski</b> , CP Interactive
<b>Jon Duarte</b> , Jon Duarte Communications	<b>Michael McAnear</b> , National University
<b>Susan Horowitz</b> , Pacific New Media	<b>Jan McWilliams</b> , Art Institute of California
	<b>Ed McNulty</b> , PBS Hawai'i

<b>NEW MEDIA ARTS</b> <b>Faculty Representatives</b>	
Teri Durland, Counselor Ailed García Saavedra, Interface Design Chris Gargiulo, Interface Design Jan Hathaway, Program Coordinator Interface Design	Karen Jones, Interface Design Joseph Tremonti, Animation Sharon Sussman, Animation Darin Yamashita, Lab Manager
<b>Student Representatives</b>	
My Anh Lu, Animation Major	Chris Ota, Interface Design Major

<b>Campus Representatives</b>	
David Behlke, Art Sarah Bremser, Art Carl Jennings, Art Elizabeth Nakoa, Art	Cheryl Souza, Art Bob Moeng, Math and Sciences Steven Singer, Information Technology

<b>Campus Administration</b>	
Leon Richards, Chancellor Louise Pagotto, Vice Chancellor	Kauka Desilva, Chair, Arts and Humanities

### Part III. Quantitative Indicators for Program Review

#### Data Tracing History of ATS1 & NMA Program

Table 1a

	Fall 2003	Fall 2004	Fall 2005
<b>NMA Majors</b>	24	65	64
<b>New NMA</b>	21	47	23

Table 1b

	Fall 2003	Fall 2004	Fall 2005
<b>ATS1 Majors</b>	51	13	5
<b>New ATS1</b>	23	2	1

Table 3a

Number of Majors in AY		2002	2003	2004	2005
<b>NMA</b>		0	3	26	64
<b>ATS1</b>		47	51	50	11

Table 3b

Number Certified in AY		2002	2003	2004	2005
<b>NMA</b>		0	0	4	16
<b>ATS1</b>		4	13	18	8

Table 4a

Number of Majors in AY		2002	2003	2004	2005
<b>Combined</b>		47	54	76	75

Table 4b

Number Certified in AY		2002	2003	2004	2005
<b>Combined</b>		4	13	22	24

Table 2

	Fall 2003	Fall 2004	Fall 2005
<b>NMA Applicants</b>	19	26	25
<b>ATS1 Applicants</b>	25	3	0

Table 3c

Leaver Grad Rate	2002	2003	2004	2005
<b>NMA</b>	0.00%	0.00%	15.38%	25.00%
<b>ATS1</b>	8.51%	25.49%	36.00%	72.73%
<b>Combined</b>	8.51%	23.21%	28.95%	32.00%

**Data: NEW MEDIA ARTS ONLY**

***Demand***

<b>Enrollment / Admission</b>	F03	F04	F05	F04-F05 Diff	% Change
Number of majors	24	65	61	-4	-6.15
Number of new majors	21	47	23	-24	-51.06
Number of applicants	19	26	25	-1	-3.85
Number of FTE majors	45.00	70.75	60.50	-10.25	-14.49
Number of FTE faculty	2.25	4.50	4.50	0.00	0.00
Number of SSHs Taken by NMA	260	643	563	-80	-12.44
Number of SSHs in NMA Classes	540	849	726	-123	-14.49

**Employment Opportunities**

Current positions	N/A
Projected positions	N/A
Average openings per year	N/A

***Effectiveness***

**Satisfaction**

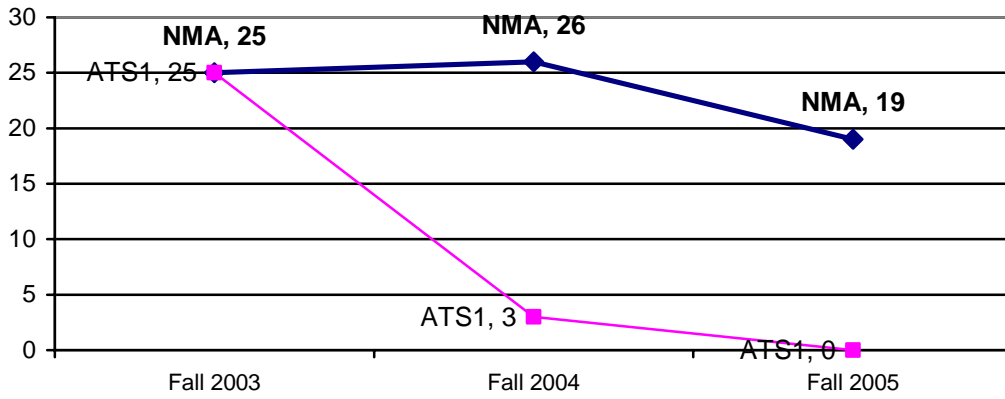
Students	N/A
Employers	N/A

<b>Program</b>	02-03	03-04	04-05	F04-F05 Diff	% Change
Leaver graduation rate	0.00%	15.38%	25.00%	9.62	62.50
Number of degrees/certificates awarded	0	4	16	12	300.00

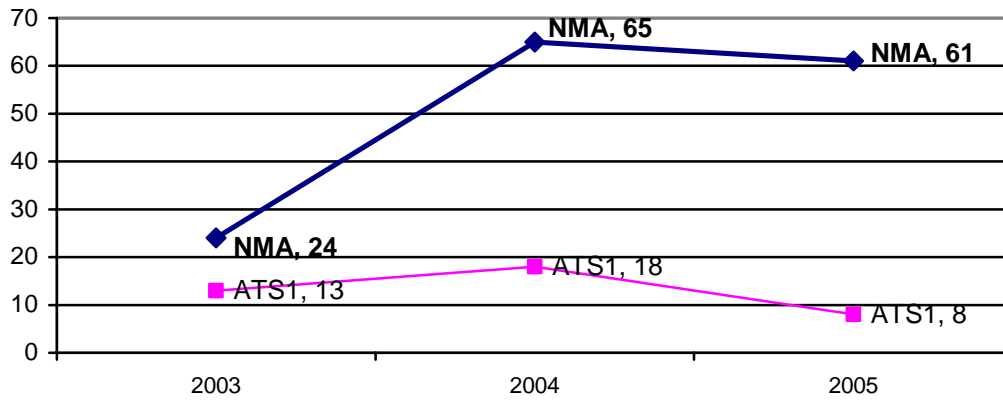
***Efficiency***

<b>Program</b>	F03	F04	F05	F04-F05 Diff	% Change
FTE students per FTE faculty	20.00	15.72	13.44	-2.28	-14.49
Average class size	14.77	14.00	12.50	-1.50	-10.71
Occupancy rate	103.78%	96.39%	84.75%	-11.64	-12.08

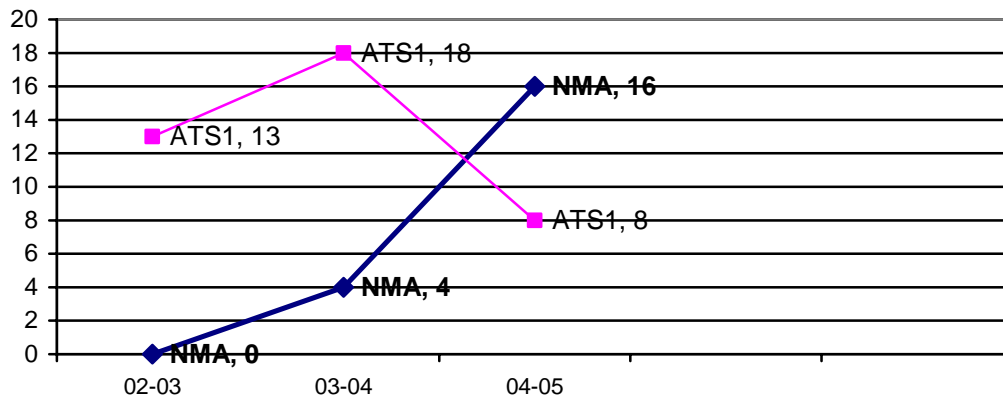
## Applications



## Majors



## Graduation



**More Data for Program Review  
New Media Arts**

***Demand***

<b>Enrollment</b>	AY '03 - '04	AY '04 - '05	AY '05 - '06
Semester Hours for Program Majors in All Program Classes	606	972	738
Student Semester Hours for All Program Classes	978	1,281	1,218
	AY '03 - '04	AY '04 - '05	AY '05 - '06
Number of Classes Taught	27	33	38
Semester Hours Taught	81	99	114

***Effectiveness***

<b>Program</b>	AY '03 - '04	AY '04 - '05	AY '05 - '06
Persistence of Majors (Fall to Spring)	90.48%	80.00%	95.00%
	Fall '03	Fall '04	Fall '05
Success at Another UH 4-Year Campus (for Fall Cohorts)			

NMA --Perkins Core Indicators	1P1	1P2	2P1	3P1	3P2	4P1	4P2
2002-2003							
2003-2004	100.00	100.00	0				
2004-2005	100.00	60.00	100.00				

***Efficiency***

<b>Program</b>	AY '03 - '04	AY '04 - '05	AY '05 - '06
Semester Hours Taught by Lecturers	39	45	42
Percent of Classes Taught by Lecturers	48.15%	45.45%	36.84%
FTE Workload	3.00	3.67	4.22

## Part IV. Curriculum Review and Revision

The Board of Regents approved the three Associate in Science in New Media Arts degrees in the summer of 2001. Subsequently all the curricula were reviewed and starting in Spring 2002 twelve new Interface Design and nine Animation course outlines were developed and approved:

<b>Interface Courses</b>
ART 125 Introduction to Graphic Design
ART 127 Graphic Symbolism
ART 128 Interface Programming I
ART 129 Corporate Identity
ART 155 Information Architecture
ART 159 History of Communication Design
ART 229 Interface Design I
ART 249 Interface Design II
ART 257 Motion Graphic Design
ART 258 Interface Design with Dynamic Content
ART 266 Typography
ART 295 Design Portfolio

<b>Animation Courses</b>
ART 156 Digital Painting
ART 157 Film Analysis & Storytelling
ART 158 History of Animation
ART 246 3D Computer Graphics III
ART 247 Lighting and Rendering
ART 248 Digital Post-Production
ART 256 Compositing
ART 259 Gaming & Realtime Computer Graphics
ART 296 Demo Reel Development

The updates to the program appear in the “*University of Hawaii Kapi’olani Community College General Catalog 2003-2005*,” pp. 420-6.

## Part V. Analysis of Program

### *Alignment with Mission*

The New Media Arts Program specifically supports the following components of the College's mission:

- prepares students to meet rigorous employment and career standards by offering 21st century career programs.
- uses human, physical, technological and financial resources effectively and efficiently to achieve ambitious educational goals.
- builds partnerships within the University and with other educational, governmental, business, and non-profit organizations to support improved learning from preschool through college and lifelong.
- uses cycles of qualitative and quantitative assessment to document degrees of progress in achieving college goals and objectives.

### *Program Demand*

The New Media Arts degree was approved in 2001. Officially the program began in Fall 2002 with three student majors. Fall 2003 was the first year that the Program formed the first two specialization cohorts with a total of 26 majors of which 16 graduated by Summer 2005 completing the first two-year cycle (page 13, Tables 3a and 3b).

Since the late 1990's before the AS degree was available, students seeking a degree in New Media Arts chose the Associate in Technical Studies (ATS) degree. A number of these ATS students elected to also complete the AS degree. In Fall 2004 the number of new majors was forty-seven (page 13, tables 1a and 1b). With the introduction of the AS degree, a number of courses used for the ATS degree were incorporated into the AS degree. NMA ATS students who had completed entry-level first and second semester NMA courses were able to enroll in third and fourth semester AS courses. This bulge of students is apparent in the data provided above. Because of the students already in the ATS pipeline, third and fourth semester courses had ample students to fill the classes from the first semester that the new curriculum was introduced. The atypical high number of declared majors corrected itself the next year. This accounts for the sharp decrease of -51.06% in applications between Fall 2004 and Fall 2005 (page 14, Demand).

The number of applications in Fall 2005 was twenty-five with twenty-three majors accepted into the AS program. This application rate is considered healthy. The desired number of applicants is higher than can be accommodated so that the selection process is from a larger pool than from the maximum of 30 new majors that can be accepted

annually. From Fall 04 to Fall 05 the number of applicants has only dropped one or - 3.85% (page 14, Demand).

The AS Program has space available for thirty entry-level students annually, fifteen entry-level students for the Animation Specialization cohort and fifteen entry-level students for the Interface Design Specialization cohort, based on the course enrollment caps of fifteen per class and on the availability of computers and site licenses. Overall the pattern has shown a shift in the enrollment from ATS majors to AS majors. In 2003 there were fifty-one ATS majors and three AS majors. In 2005 there were eleven ATS Majors and sixty-four AS majors (page 13, table 3a).

Students are accepted into the program through a portfolio review and on a “space available” basis. The latter is one of the reasons that the number of student semester hours is increased and higher than if only those accepted into the two Specializations were taking courses. Another reason for the increase in the Student Semester Hours (SSH) is that there are ten sections of the course *Introduction to Digital Art* offered annually, which can be taken as a prerequisite by those interested in applying to the NMA program, as well as by students from across campus and in the community who take it as an elective (page 14, Demand). It also accounts for the higher SSHs in all program classes for academic year 2004 – 2006. The total number of classes taught has increased since academic year 2003 – 2004. This gradual increase, from 27 to 38, relates to the introduction of the new curriculum and multiple sections of the Internship and Practicum classes (page 16, Demand).

Employment opportunities for NMA graduates are varied and growing. According to the U.S. Department of Labor, jobs for animators and designers will grow from 9 to 17 percent between 2004 and 2014, “which is faster than the 14 percent growth projected for wage and salary employment in all industries combined. Future job growth for our students will result from the explosive growth of demand for programming needed to fill an increasing number of cable and satellite television channels, both in the United States and abroad. Also, more films will be needed to meet in-home demand for videos, DVDs, and films over the Internet” (<http://www.bls.gov/oco/cg/cgs038.htm#related>) (<http://stats.bls.gov/oco/ocos090.htm>).

The video game industry also continues to grow at an exponential rate. According to Anita Frazier, Entertainment Industry Analyst for the NPD Group, a well established research group ([http://webbolt.ecnext.com/coms2/news\\_58551\\_RCH](http://webbolt.ecnext.com/coms2/news_58551_RCH)).

The State of Hawai'i occupational projections do not reflect the same demand. Since this is a new industry the figures for the State of Hawai'i are not comprehensive. For example, the State of Hawai'i Occupational Projections from 2002 to 2012 show an increase that is lower than the national picture. (<http://www.projectionscentral.com/projhome.asp>) Data for the Hawai'i Workforce Informer is not available for Multimedia Artists and Animators (<http://www.hiwi.org/>). Although Web design is the largest and fastest growing component of the multimedia industry in Hawai'i, it is difficult to assess how many people are designing, developing

and maintaining Web sites in the State. There are many graphic design and advertising companies that have added Web services to their print based services. Also, numerous companies in the State employ others to take care of their company's site. It is unclear if the projections of the State include jobs associated with interactive media-Web sites, etc. because long term projections in the State of Hawai'i Occupational Projections for 2012 show 200 Multi-Media Artists and Animators and 650 Graphic Designers which seems to be a low estimate. Consideration should be given to the currency of this projection, which is dated 2002.

### *Program Efficiency*

The variation in the program efficiency rates from Fall 2003 to Fall 2005 is due to the bulge of students in 2003 that switched from the ATS degree to an AS degree, most of whom were pursuing both degrees simultaneously. All efficiency rates are healthy at any one time in any one year (page 14, Efficiency).

In Fall 2005 the Full Time Equivalent (FTE) ratio of students per FTE faculty was 13.44. It must be noted though that annually the program offers five to six sections of Art 293V New Media Arts Internship and Art 294 New Media Arts Practicum, which because of the nature of the courses, have a restricted enrollment cap of ten students. This limited class size affects the efficiency ratios.

Besides the FT faculty, lecturers taught 42 semester hours or 36.84% of the courses in academic year 2005 – 2006 down from 45.45% the previous academic year (page 14, Efficiency). This decline is due to the hiring of a second full-time Interface Design instructor. Although NMA reliance on lecturers is reduced, additional full-time instructors are needed to predictably fulfill student learning outcomes. As noted in the History section page 6, securing the services of qualified lecturers is problematic based on competition with industry salaries, lack of potential candidates with a masters degree and adequate teaching experience.

The NMA average class size for the years F03-F05 ranged from 14.77 to 12.50, but the occupancy rate remains relatively high (84.75% full at the lowest point). Comparing the number of applicants for the years F03-F05 shows a decrease because in Fall 2003 there were 25 ATS applicants in addition to the NMA applicants, but by F05 there are zero ATS applicants and 25 NMA (page 13, Table 2).

With regards to FTE majors per FTE faculty, the change is not significant over the last two years that the NMA program has been in full swing. The first line in the Efficiency table (p. 13) shows the difference is a ratio of 2.28 or 14.49%. This decline is related to the decrease in the number of FTE majors, which dropped from 70.75 in Fall '04 to 60.50 in Fall '05 (page 13, Table 1a).

### *Program Outcomes and Effectiveness*

The combined Leaver graduation rate for both AS and ATS students was 32% for Fall 2004 – Spring 2005. The Leaver graduation rate for AS majors was 25% and for ATS students 72.73% (page 13, Table 3c). This higher graduation rate for ATS students can be attributed to the fact that many elected to graduate while no new ATS majors enrolled in the program.

F03 is when the new curriculum was introduced and the NMA program actually started by establishing two cohorts consisting of 14 Animation accepted majors and 15 majoring in Interface Design. The results are that 10 Animation and 6 Interface Design majors graduated two years later in F05 (p. 13, Table 3b) and two more Interface Design majors graduated in S06, thus a total of 62.07% of the first cohorts has graduated. Of the 11 majors who have not graduates, four dropped out, one was called up for military service, but has returned recently, one transferred to another school on the mainland, one already had a BFA and works for KCC at present, three continue to enroll as students, and one has one class left to take.

The persistence of majors from Fall to Spring is 95.00% in AY'05 – '06. This high figure is typical of a select program. Students accepted into a specialization as a cohort have made a commitment to a degree, are supported by being with the same students in the cohort, and enjoy many hours of contact with a small number of the same faculty. Thus, they are more likely to stay in the program.

The student learning in the NMA courses is assessed by portfolio review, where students need to demonstrate that they have achieved course-specific intended learning outcomes. The attainment of program outcomes is attested by the successful employment of students in the multi-media industry.

NMA graduates have found employment with leading local and international companies in the multimedia sector, which include Jamdat, Mobicore, Cause & FX Pictures, Sprite Entertainment, 'Olelo Community Television, Madskill Productions, Konami Computer Entertainment, Professional Results, CP Interactive, Referentia, Inc., Blue Lava Wireless, Polygon Pictures, StarrTech Interactive, PBS Hawai'i, Revacomm, Firefly and Jon Duarte Communications. Three students have started successful businesses: Sync Ink LLC, Candy Graphics and Midori Designs Online. The students working at these companies have graduated within the last three years. No job tracking of former graduates is available at this time. Several of these companies including Konami Computer Entertainment, Jon Duarte Communications, Mobicore, Madskill Productions, and StarrTech Interactive have employed or currently employ more than one NMA graduate.

Jamdat	<a href="http://www.ea-mobile.com/Web/Catalog/">http://www.ea-mobile.com/Web/Catalog/</a>
Mobicore	<a href="http://www.mobicore.com/">http://www.mobicore.com/</a>
Cause & FX Pictures	<a href="http://www.kftv.com/">http://www.kftv.com/</a>
Sprite Entertainment	<a href="http://www.spritee.com/">http://www.spritee.com/</a>
'Olelo Community Television	<a href="http://www.olelo.org/">http://www.olelo.org/</a>

Madskill Productions	<a href="http://www.madskillproductions.com/">http://www.madskillproductions.com/</a>
Konami Computer Entertainment	<a href="http://www.konami.com/">http://www.konami.com/</a>
Professional Results	<a href="http://www.professionalresults.com">http://www.professionalresults.com</a>
CP Interactive	<a href="http://www.commpac.com">http://www.commpac.com</a>
Referentia, Inc.	<a href="http://www.referentia.com/">http://www.referentia.com/</a>
Blue Lava Wireless	<a href="http://www.bluelavawireless.com/">http://www.bluelavawireless.com/</a>
Polygon Pictures	<a href="http://www.ppi.co.jp/ppi_home.html?selno=-">http://www.ppi.co.jp/ppi_home.html?selno=-</a>
StarrTech Interactive	<a href="http://www.starrtech.com/">http://www.starrtech.com/</a>
Revacomm	<a href="http://www.revacomm.com">www.revacomm.com</a>
Firefly	<a href="http://www.fireflyhawaii.com/">http://www.fireflyhawaii.com/</a>
Jon Duarte Communications	<a href="http://www.jonduarte.com/">http://www.jonduarte.com/</a>

*NMA Graduates Business urls:*

Midori Designs Online	<a href="http://www.midori-designsonline.com/">http://www.midori-designsonline.com/</a>
Candy Graphics	<a href="http://www.candy-graphics.com/">http://www.candy-graphics.com/</a>

A number of NMA graduates are pursuing their baccalaureate through the Academy for Creative Media or their Bachelor of Fine Arts through the Art Department at the University of Hawai'i at Manoa. Other NMA graduates are seeking baccalaureate degrees at mainland schools including Southern Alberta Institute of Technology in Calgary, Ringling School of Art and Design in Florida and the Academy of Art University in San Francisco. Additionally a Certificate is being developed with Business Education at Kapi'olani Community College to expand on-campus educational opportunities for NMA students seeking additional programming and entrepreneurial courses.

*Perkins Core Indicators for the CTE Program*

The calculations are based on a very small number of only five concentrators, i.e. participants who have been awarded a degree or certificate in a career technical program. This small number affects the Postsecondary Vocational Skill Attainment (1P2), where the indicators are for the two years, respectively, 100 and 60 percent. It should be noted that all New Media Arts courses are labeled with the "ART" alpha and are thus designated as Liberal Arts not Career Technical Education (CTE) courses. Therefore, the percentage is not a valid measure of the 1P2 Perkins Indicator since all the program courses are excluded from the calculation. Of the five concentrators, two took CTE courses outside of the NMA program and earned grades below a "C", which explains the 60 percent. None of their NMA courses were counted in the evaluation although the grades earned by these students were above the required "C" grade.

The Perkins Core Indicators from 1P1 to 4P2 hardly apply to the New Media Arts because of the short history of the Program. The Postsecondary Academic Skill Attainment (1P1) is 100 percent for both AYs '03-'04 and '04-'05 (page 17, Effectiveness). For the Postsecondary Degrees and Credentials (2P1) for the AY'03-'04 and '04-'05 the indicators are respectively 0 and 100 percent (page 16, Perkins Indicators).

A difficulty with assessing Perkins Core Indicators has arisen due to the use of the ART alpha. Although using NMA as an alpha is a possible solution, throughout the history, planning and revision for the NMA program, the consensus of the participants in the discussions has always been that it would be best to keep New Media Arts courses identified as ART courses because the content of the degrees has a strong art focus that is more in tune with the aesthetic sense necessary to produce quality multimedia work. Many of the industry professionals emphasized that they prefer to hire those with a developed sense of art. Technical expertise is important, but they believe that the greater skill lies in developing an artistic eye than in the acquisition of the computer skills. The use of the ART alpha also makes it easier for students to transfer courses to schools elsewhere in the U.S.

### *Strengths Based on Analysis of Data*

New Media Arts, a newly established program, is overall successful as evidenced by the analysis and tables presented above. The occupancy rate for F05 is high (84.75%), even after the bulge of students in the former ATS program have left the program (page 14, Efficiency). The number of applicants is steady, with 19 in F03 when the program was relatively new, followed by 26 in F04 and 25 in F05 (page 14, Demand). The number of SSH by majors and in NMA classes is growing compared to two years ago, from 260 in Fall 03 to 5633 in Fall 05. The number of graduates has been increasing as well: in 2004 there were 4 graduates followed by 16 in 2005 (page 14, Program).

The NMA Program curricula are completely up-to-date with current industry standards. All of the faculty members are highly qualified, maintain contemporary technological knowledge and continually integrate this expertise into their teaching.

Program quality is achieved by requiring students to secure a minimum of a "C" grade for all program courses. All faculty members assess SLOs and base their grading system on the criteria set out in the method of evaluation found in the course outlines. Hence, the average student achievement grade can be seen as a result of effective teaching and student learning.

The success with which the program operates is also reflected in students' securing employment after graduation. Although no percentage is available, the list of job locations is significant, based on the number of students that have already graduated.

### *Weaknesses Based on Analysis of Data*

#### (1) Concerning Student Applicants

Although not weak for a new program, it would be desirable that a much larger number of students apply than can be accepted into the NMA Program. In all, 15 students per cohort can be accepted into the program or a total of 30 new applicants. As the

Demand table indicates (page 14), there were 25 applicants and 23 accepted for F05, thus two applicants were denied admission.

## (2) Concerning Graduates:

Some students who have dropped out of the NMA program have not officially changed their major but continue to take other KCC courses. This situation negatively impacts the data, especially the rate of graduation.

## (3) Concerning Faculty:

A major challenge is to find lecturers in the small local population that have the qualifications in their respective field, experience in the industry of animation or interface design, and teaching ability in this rare combination of the arts and technology. This problem ties in with a secondary issue, namely, the curricula cannot always be offered the way it was designed because of staffing shortages. A number of courses, ranging from a low of one to a high of four each year, cannot be offered because there are no qualified lecturers available to teach them (page 6, Table Staffing and NMA Courses). Lastly the low salaries offered compared to those in industry constrains the recruitment and filling of positions.

## *Recommendations for Improving Student Learning Outcomes*

### (1) Concerning Applicants

Two steps need to be taken to increase the number of student applicants to the NMA program so that the best possible selection can be made and all 15 places in each cohort be filled with the highest ranking applicants. First, contact and communication with teachers of digital media art in the local middle and high schools should not only be continued, but enhanced by offering presentations to the students and conducting summer workshops, tailored and marketed to help students gain interest and a greater appreciation of what digital media arts has to offer and where their career can lead. It is expected that through greater visibility the number of applications will increase to above what is considered healthy and make the selection process more competitive. An increased competitiveness among students will benefit the growth of the program and ultimately the multimedia industry in the State.

Secondly, communication with the multimedia business community should be improved. Employees working at these businesses need to be attracted and become interested to attend NMA courses through the continuing education program offerings or take courses through the portfolio process. Increasing the number of continuing education courses offered to professionals updating their career skills or simply to students who are curious about a possible added dimension to their career is ultimately attracting attention to the program.

To better market the program, the NMA website should include a provision for an online survey to gather information and increase communication with current and former students, industry professionals and the educational community of teachers and prospective students. The site also can provide portfolio space for graduates to showcase the outcome of their NMA degree program. A more interactive NMA website will generate much valuable information, be a cost effective method of marketing the program, and make a good tool for further assessment of needs in developing the first choice for this type of education with a vision and the values for the future.

Increased collaboration with UHM departments may also yield additional applicants. Many courses offered in Interface Design at KCC are not offered at UH Manoa Arts Department. The newly established Academy of Creative Media (ACM) offers a BA in Gaming. While KCC's entry-level courses in Animation are similar to those offered at ACM, the focus here is on computer-based hands-on learning, which could prove to be attractive to UHM students, using KCC's AS degree as a starting point for their BA at ACM.

Another recommendation is a reduction of the number of courses for credits towards the AS degree. A maximum of six courses could be reduced from the NMA Program, primarily in the specialization of Animation, where students could seek advanced courses at UHM's Academy for Creative Media. The number of required courses for the Interface Design degree is less likely to be reduced, but if it is to be considered, it would be no more than two courses.

## (2) Concerning Graduates

New business contacts should be sought and communication with existing ones vigorously increased to secure greater opportunities for internships and job placements after graduation for NMA students.

As shown above the trend of graduation rate is higher than reflected in the charts. Attention should continue to be given to the students in assisting them in their goal to graduate. It is recommended that the effort to follow up on a student's progress is intensified. Due to the size of the program and the faculty and counselor being familiar with each student, it is possible to work with them on a personal basis individually. With the program counselor and coordinator's increased focus towards graduation goals, it is anticipated to successfully raise the student graduation rate.

## **Part VI. Action Plan**

### (1) Program Related Action

- The Program Coordinator will submit a request for permanent status for presentation to the Board of Regents in Fall 2006.

- The NMA Information Architecture Specialization AS degree is under review to be eliminated.
- The Program Coordinator will seek funding for major upgrades to the labs and special projects to assist in achieving standards.
- Faculty with the input from the student body and advisory board will evaluate the scope of the New Media Arts degrees. If so determined the number of credits will be reduced, program student learning outcomes will be reassessed, and revised course outlines implemented. Given the aforementioned scenario, the full-time faculty will teach more of the NMA curriculum instead of relying heavily on lecturers.
- Funds are being sought for major upgrades to the labs and for special projects to assist in achieving standards.

## (2) Marketing and Student Recruitment

- The Program Coordinator will develop a Certificate with KCC Business Education to expand on-campus educational opportunities for NMA students seeking additional programming and entrepreneurial courses. To be completed by the end of 2006.
- Throughout the AY the Program Coordinator integrates new recruitment methods to increase enrollment by raising awareness of the quality multimedia education of the NMA Program at every opportunity.
- An Interface Design faculty member will produce and link a NMA website to KCC's, providing information including visual samples and exhibition space for NMA graduates of their demo reels and multimedia portfolio.
- The Program Coordinator and an Interface Design faculty member will generate a short survey to collect information through the NMA website.
- NMA Summer Workshop series begins S06 with courses for high-school students and industry professionals. Employees in the multimedia industry will be eligible for Employment and Training Funds through the Department of Labor and Industrial Relations and receive a Professional Development Certification.
- An Animation New Media Arts Instructor will host industry professionals to a New Arts Lecture Series, which 20-100 students and community professionals attend.
- The Program Coordinator and an Interface Design faculty member will create a database of local and national multimedia companies to serve as a reference for internship and job opportunities.
- The Program Coordinator will continue to organize and host the annual job fair and *Demo Reel and Design Portfolio Presentation*, which over 75 people have attended in the past.
- The Program Coordinator and other faculty members will give presentations at high school career fairs and professional conferences.

## (3) Graduates

- The Program Coordinator will seek Articulation Agreements to establish an easier transition for NMA students seeking further education after the completion

of their Associate in Science degree. These include Art Institute of California, Los Angeles; Art Center College of Design, Pasadena; Art Institute of Chicago, Chicago; and National University, USA. This is ongoing throughout the AY.

- The Program Coordinator will develop an Articulation Agreement with the Academy for Creative Media (ACM) for NMA Animation students to take ACM courses and *vice versa*. NMA Animation courses will be counted toward the ACM Bachelor in Computer Animation and Video Game Design.
- The Program Coordinator and an Interface Design faculty member will develop a survey this AY to assess student success after graduation and to track graduates after the completion of their degree.

(4) Faculty

- NMA faculty is discussing salary issues with the KCC administration about establishing New Media Arts as a high-demand program to aid in the retention of full-time faculty and the recruitment of lecturers.

**Part VI. Budget Implications**

New Media Arts maintains three computer labs with an ongoing need to update software and equipment in addition to staffing open lab hours with lab monitors. The minimum operating budget is approximately \$60,000 annually and is supported from funds of Kapi'olani Community College. This operating budget does not cover the expense of major equipment and software upgrades. The Program Coordinator actively sought and received funding from the following sources for major upgrades to the labs and for special projects to ensure superior academic achievement and career training.

Year	Funding Source	Funding Amount
2003	Carl Perkins	\$6,965.00
2004	Carl Perkins	\$47,500.00
2004	PCATT	\$74,010.00
2005	PCATT	\$27,382.00
2005	Carl Perkins	\$25,691.60
<b>Total</b>		<b>\$181,548.60</b>

Teaching four different technology based courses per semester for NMA faculty also proved unsustainable. The amount of time to update eight technology driven courses annually and to be in class for twenty contact hours a week was unrealistic. In Fall 2005 NMA faculty reached an agreement with the KCC administration to teach three courses per semester. The three and three course load will begin in Spring 2007. For Fall 2005 – Spring 2006 NMA faculty taught three in Fall and four in Spring.

## Appendix Data Elements

### Definitions

#### Demand

#### Enrollment/Admission

**Number of Majors** -- The number of students who are accepted as majors into the program during Fall 2005 as of March 2006.

Source: SCT Datamart

**Number of New Majors** -- The number of new students who are registered for 1 semester hour or more and who have been accepted into the program during Fall 2005 plus the number of continuing students who are registered for 1 semester hour or more and who change their major to this one as of March 2006.

Source: SCT Datamart

**Number of Applicants** -- The number of new students selecting this major on the common application form plus the number of continuing students who change their major to this one for consideration for Fall 2005 as of March 2006.

Source: SCT Datamart

**Number of FTE Majors** -- The number of the total student semester hours in this program during Fall 2005 as of March 2006 divided by 12.

Source: SCT Datamart

**Number of FTE Faculty** -- The number of course-semester hours taught in this program divided by 15 during Fall 2005 as of March 2006.

Source: SCT Datamart

**Number of Student Semester Hours (SSH)** -- The sum of semester hours taken by all students who are majors of this program in all regular credit courses Fall 2005 as of March 2006.

Source: SCT Datamart

#### Employment Opportunities

**Current Positions** -- The number of current statewide jobs in the category for which students in this program are being trained.

Source: State of HI Employment Outlook for Industries & Occupations, 1996 - 2006

**Projected Positions** -- The estimated number of statewide jobs in 2006 in the category for which students are being trained.

Source: State of HI Employment Outlook for Industries & Occupations, 1996 - 2006

**Average Openings Per Year** -- The estimated number of job openings in this category per year. The number of openings includes both those resulting from turnover in existing jobs and from expansion of the industry.

Source: State of HI Employment Outlook for Industries & Occupations, 1996 – 2006

### **Effectiveness Satisfaction Surveys**

*Students:* On a scale of 1 to 4 with 4 being the highest, the mean for the issue of overall satisfaction with the program, based on a survey conducted by the Office of Planning & Institutional Research and the Career Personal Development Unit.

Source: 2000 Graduate-Student Survey

*Employer:* On a scale of 1 to 4 with 4 being the highest on the item dealing with overall performance.

Source: Department Surveys

### **Program**

**Leaver Graduation Rate** -- The number of students who graduated from the program in Fall 2004, Spring 2005, and Summer 2005 divided by the number of students who were majors in this program during the same time.

Source: SCT Datamart

**Number of Degrees/Certificates Awarded** -- The total number of degrees and certificates awarded to students of this program during the academic year 2004-2005.

Source: Prior data: SCT Datamart

Current data: MAPS Reports

### **Efficiency**

**FTE Students per FTE Faculty** -- The number of the total student-semester hours (numerator) divided by 12 as of March 2006 over the number of course-semester hours offered in the program (denominator) divided by 15 as of March 2006.

Source: FTE Students: SCT Datamart

FTE Faculty: SCT Datamart

**Average Class Size** -- The sum of the number of students registered in each program course divided by the number of courses offered in the program as of March 2006.

Source: SCT Datamart

**Occupancy Rate** -- The total number of students registered in each program course divided by the sum of the number of openings for these courses as of March 2006. For these indicators, the upper and lower cutoff points are set at 80% and 65% universally.

Source: SCT Datamart