

PRENTICE COMPUTER
CENTRE

OPERATING REPORT 1989

INTRODUCTION

The most significant event in 1989 was the secondment for two years of our long-serving Director, Mr Alan Coulter, as Director of Development, and the appointment of Mr John Noad as Director of the Centre. This change led to a year marked by a major review, organisational change and rethinking of directions.

The Centre completed the financial year with a loss of \$112,000 against a budgeted loss of \$116,000. This loss will be covered by reserves from previous years.

1. OPERATING RESULTS 1989

Total revenue amounted to \$3,324,000 plus salary supplementation of \$28,775 (as calculated by the Bursar's office) which with total operating costs of \$3,436,000 allowed a transfer against reserves of a \$112,000 deficit. This result saw a rise of 6% in actual over budgeted revenue for 1989.

Operating costs were 7% over 1989 budgeted costs and 16% greater than the 1988 actuals. Revenue (excluding the charge to general fund for approved services) was 7% above 1989 budgeted revenue. Salary costs increased by \$156,000 (7.5%) whilst most other expenditure was below budget with the exceptions of consumables/spares, software charges, and staff development/travel.

One of the Centre's aims in 1989 was to increase staff training and development, and this led to an \$8,000 over expenditure on staff development and travel; similarly introduction of new software licences on the mainframe computers and the membership fee to join the IBM Higher Education Software Consortium (HESC) meant exceeding the budget by \$51,000 or 34%. However, membership of the HESC should mean reduced IBM software licence costs in future years. The major overrun for 1989 was the consumables/spares spending of \$435,000 against a budget of \$250,000. This increase in spending is due to a number of factors:

- (a) increase in PC maintenance for departments
- (b) increased parts costs especially for PDP-10 maintenance
- (c) spending on new equipment for further development of the network with no recovery
- (d) increased subsidisation of Telecom off-campus network links

Spending on PC maintenance parts was offset by revenue gained from this service, but was far greater than budgeted due to the increase in breakdown of the ageing population of PC's on campus. The cost of new equipment for the network, to advance into the newer communication technologies and to enlarge the capacity of existing equipment, represents over \$50,000 of consumables/spares spending. Funding for the purchase of UQ network equipment has never been given to the Centre, and, therefore, has always been paid from the Centre's recurrent funds as has the Telecom off campus data line subsidisation. In 1989 the Telecom subsidisation was approximately \$58,000 and will increase in 1990 with full costs for the Medical School and Gatton data lines.

Revenue Earned

Revenue earned from charged services was 25.8% higher than 1988. Revenue by user groups is detailed in Appendix E. Computing use revenue from Departments of UQ (including Innovative Teaching and Research Grants) increased by 6% and by 7% for UQ Administration. Griffith University computing use decreased slightly for schools and affiliates but increased by 32% for Administration. This increase in Griffith Administration computing use is a once only situation. Griffith Administration work will disappear in 1990 when they transfer their accounting system to their own mainframe.

Overall revenue from usage of central computing facilities increased by 3%. The major area of revenue increase was in contract work which was more than double the 1988 revenue. This was due to the Centre working on several large software contracts. These contracts will not continue into 1990. However the Centre has, through this work, gained recognition of its ability to provide outstanding support in all areas of software development, and hopefully should gain more contracts in this development area during ensuing years.

2. SYSTEM STATISTICS

During 1989, the Centre operated six host systems - DEC dual processor KL10, DEC VAX 8650, DEC VAX 8550, DEC VAX 11/780, IBM 3081, and a Computervision CAD/CAM system.

System performance statistics for the VAX Cluster and IBM 3081 are illustrated in Appendix G.

3. USER EDUCATION

A total of 89 courses attended by 964 staff and post-graduate students were offered in 1989. Much of the workload, during the latter half of the year, was accomplished by one full-time and one half-time Education Officer.

Of the 89 courses, 44 were mainframe courses and 45 were PC based courses. It is apparent from enrolments that the PC courses are extremely popular and are booked out within a period of 1-2 days after release of the timetables with an average of 6-8 people on each waiting list.

Mainframe courses for 1990 will include new Oracle database courses and the introduction of some "user pays" undergraduate PC courses.

4. STAFFING

Attracting experienced professional computing staff to the Centre during 1989, continued to be a problem, but one which is also being experienced in other sections of the University. Although we do not have the same problem attracting new graduates, the Centre is then left with a training problem and the further complication that these staff only seem to stay until they have gained 2-3 years of experience and can command a higher salary.

A new salary scale for professional computing staff was developed and submitted to the University during 1989 and, at this time, is still under consideration.

SUMMARY

The computer usage revenue figures give a clear indication of the decreasing use of mainframe computers and the increasing use of stand-alone machinery, such as Personal Computers.

Revenue from Other Educational Institutions and External Users has rapidly dwindled to such an extent that the figures now form a very small proportion of our overall computer revenue. During 1989, Griffith University removed their payroll system from the KL10 and will remove their accounting system from 1 January 1990. This will mean that, from 1990 onwards, the revenue from Griffith will dwindle away very quickly. Proposed changes to the present TE score system, may eventuate in losses of revenue from QTAC.

In the contract area, revenue continues to increase, and from 1990 the University has agreed to fund the campus-wide network as a strategic resource. This funding will stop the drain on the Centre recurrent funds which have borne the brunt of improving the network, for all campus users, since 1982. Advice and help to departments and staff on PC use and use of packages has increased dramatically over the past three years, to such an extent that an extra staff member is required to cope with the load, and this has been included in our 1990 Budget and hopefully, will be funded by the University.

Overall, the Centre is and has been introducing new services which provide substantial benefits to all University users.

FINANCIAL STATEMENT
PRENTICE COMPUTER CENTRE OPERATIONS ACCOUNT SUMMARY 1989

	<u>REVENUE (000's)</u>		<u>ACTUAL</u>		<u>EXPENDITURE (000's)</u>		<u>BUDGET</u>		<u>ACTUAL</u>	
		<u>1989</u>	<u>1989</u>			<u>1989</u>	<u>1989</u>	<u>1989</u>	<u>1989</u>	<u>1989</u>
<u>Computer Use:</u>										
Internal University of Qld	1257		1398		Net Salaries - PCC (1)	2183		2198		
Internal Griffith University (2)	320		247		(Actual salary costs \$2,227,197 less					
Other Educational Institutions	9		15		Salary Supplementation \$28,775)	250		435		
External	56		43		Consumables, Spares, Telecom, etc	352		332		
					Contract Equipment Maintenance	149		200		
<u>Contract Services:</u>					Software Charges	86		81		
Applications Development (2)	502		508		Stationery	142		122		
PC/Workstation Support	156		242		Electricity	16		13		
Education	6		20		Insurance	10		4		
Operations	40		25		Magnetic Tapes and Packs	5		-		
Large Systems Software	4		11		Furniture and Fittings	15		13		
Campus Data Network	120		92		Air Conditioning Maintenance	30		38		
Network Engineering (3)	210		206		Staff Development and Travel	3		-		
Cash Sales	4		11		Publications					
Finance and Administration	-		9							
CDN - Installations/Rentals	150		206							
<u>Charges to General Fund for</u>										
<u>Approved Services rather than</u>										
<u>charges to individual users -</u>										
University of Queensland	273		273							
Griffith University	18		18							
Transfer to Reserve	116		112							
	3241		3436			3241		3436		

NOTES: Refer following page.

- (1) Budget estimates were based on expected December 1988 rates - Award and CPI increases being covered by Salary Supplementation of \$28,775.00 as calculated by the Bursar's Office.
- (2) Adjusted for payments of: \$173,158 for QTAC 1989 processing and programming; \$22,183 for Griffith computing and contract work - cheques not processed until January 1990 due to Universities holidays.

PRENTICE COMPUTER CENTRE OPERATIONS ACCOUNT SUMMARIES 1986-1989

<u>REVENUE (000s)</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>EXPENDITURE (000s)</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<u>Computer Usage:</u>									
Internal University of Queensland	1130	1202	1233	1398	Gross Salaries (1)	1916	2074	2070	2226
Internal Griffith University	353	326	320	247	Maintenance (2)	483	533	714	435
Other Educational Institutions	19	15	7	15	Stationery	62	84	71	81
External	293	234	125	43	Electricity	112	130	131	122
					Insurance	15	16	15	13
<u>CAD/CAM System Use:</u>	52	30	30	-	Magnetic Tapes and Packs	15	7	8	4
					Furniture and Fittings	1	2	1	-
<u>Contract Services:</u>					Air Conditioning Maintenance	16	10	14	13
User Services and Equipment Maintenance	656	502	-	-	Staff Development/Travel	21	21	29	38
Applications Development	-	-	365	508	Publications	3	-	-	-
PC/Workstation Support	-	-	160	242	Contract Equipment Maintenance	-	-	-	332
Education	-	-	-	20	Software Charges	-	-	-	200
Operations	5	-	35	25					
Large Systems Software	-	-	3	11					
Campus Data Network	-	-	-	92					
Network Engineering	13	18	26	206					
Finance and Administration	-	-	9	9					
Scientific Displays	-	-	28	-					
Cash Sales	8	8	8	11					
CDN - Installations/Rentals	-	-	-	205					
Salary Supplementation	39	31	69	29					
<u>Charge to General Fund for Approved Services:</u>									
University of Queensland	195	251	261	273					
Griffith University	27	35	18	18					
Network Development - CDN	4	45	-	-					
CDN (Contracts, new services, rental)	-	-	254	-					
Transfer from Reserve Fund	-	80	102	112	Transfer to Reserve Fund	138	-	-	-
	2794	2877	3053	3464		2794	2877	3053	3464

NOTES: Refer following page.

- (1) Actual staff costs including payroll tax, overtime, penalty payments and other staff costs.
- (2) Includes CDN maintenance costs for 1988 only as previously CDN revenues and expenditures were charged against suspense accounts whilst loan was repaid.

REVENUE EARNED 1986 TO 1989 (\$000s)

THE UNIVERSITY OF QLD GRIFFITH UNIVERSITY

	YEAR	ACADEMIC	ADMIN	AFIL.	ACADEMIC	ADMIN	AFIL.	OTHER EDUC INSTITUT.	EXTERNAL	CASH SALES	HARDWARE	TOTAL
COMPUTING AND CASH SALES	1986	423	701	45	91	105	106	16	282	2	-	1770
	1987	378	745	29	94	172	126	18	228	2	-	1792
	1988	422	751	34	72	120	148	9	108	6	-	1670
	1989	446	804	46	68	158	147	8	39	11	-	1727
CONTRACTS	1986	40	31	12	4	90	57	19	9	-	-	262
	1987	61	29	33	3	132	70	7	8	-	-	343
	1988	127	69	72	4	52	73	1	22	-	-	420
	1989	181	179	171	3	39	67	3	219	-	-	862
HARDWARE AND PC SUPPORT	1986	-	-	-	-	-	-	-	-	-	245	245
	1987	-	-	-	-	-	-	-	-	-	196	196
	1988	-	-	-	-	-	-	-	-	-	160	160
	1989	-	-	-	-	-	-	-	-	-	242	242
TOTAL	1986	463	732	57	95	195	163	35	291	1	245	2277
	1987	439	774	62	97	304	196	25	236	2	196	2331
	1988	549	820	106	76	172	221	10	130	6	160	2250
	1989	627	983	217	71	197	214	11	258	11	242	2831

Notes: 1. Figures refer to revenue earned during the year. There may be variations between these and revenue brought to account in expenditure and revenue statements.

2. Figures do not represent relative work load on computers due to variations in use of priorities, changes to rates and charge factors for different classes of users. External users are charged at 3.7 times the internal rate and other educational institutions at 1.7 times the internal rate.

APPENDIX D

PRENTICE COMPUTER CENTRE
REVENUE EARNED BY SOURCE OF FUNDS

	<u>\$000s</u>	<u>\$000s</u>
<u>THE UNIVERSITY OF QUEENSLAND</u>		
<u>Teaching and Research</u>		
Maintenance	92	
U.R.G.	202	
U.C.	5	
Research Grants and Scholarships	22	
Other (3)	<u>306</u>	627
<u>Academic Support</u>		
Maintenance	59	
U.R.G.	3	
Other	<u>8</u>	70
<u>Administration</u>		983
<u>Affiliated</u>		147
<u>Charges to the General Fund for Approved Services</u>		273
<u>GRIFFITH UNIVERSITY</u>		
Schools	71	
Administration	197	
Affiliated	4	
Charges for Approved Services	<u>18</u>	290
<u>OTAC</u>		210
<u>OTHER EDUCATIONAL INSTITUTIONS (1)</u>		11
<u>OTHER USERS (2)</u>		<u>258</u>
<u>TOTAL</u>		<u>2869</u>

(1) Charged at 1.7 times internal rate

(2) Charged at 3.7 times internal rate

(3) Includes payments for IBM usage which was not available by fund source

Note: Excludes hardware and PC maintenance services and Cash Sales as existing University accounting procedures do not allow for a division by source

PRENTICE COMPUTER CENTRE

REVENUE EARNED UNIVERSITY OF QUEENSLAND BY DEPARTMENTS - 1986, 1987, 1988, 1989

A. TEACHING & RESEARCH DEPARTMENTS	1986	1987	1988	1989
Aboriginal and Islander Studies	102	-	386	40
Agriculture	24820	12789	10959	7130
Anatomy	890	3143	1737	3969
Anthropology and Sociology	22854	31624	46512	63219
Architecture	882	1302	1691	4250
Arts Faculty	625	728	1005	1289
Biochemistry	1954	925	2429	2097
Botany	2632	1591	1247	2939
Chemistry	13997	14618	29531	41034
Child Health	2023	2639	5301	16655
Classics and Ancient History	-	-	2356	1892
Commerce	10920	3669	6288	7315
Computer Science	22958	15236	13958	9848
Dentistry	6563	4345	3982	12416
Economics	12267	15043	9298	6525
Education	13656	11875	12901	14723
Engineering - Chemical	44147	33868	44140	56429
Engineering - Civil	36450	50546	53026	48963
Engineering - Electrical	4541	5396	2833	1441
Engineering - Mechanical	25914	29106	54027	55265
Engineering - Mining and Metallurgy	6079	9407	16390	25696
Engineering - Faculty	178	370	507	596
English	3920	2399	3221	3431
Entomology	1391	2252	2282	2271
External Studies	34719	29701	24145	28716
Faculty of Agricultural Science	-	-	711	2781
Faculty of Architecture	327	12	54	345
Faculty of Commerce and Economics	692	607	1257	1117
Faculty of Medicine	2095	1824	3256	3835
Faculty of Science	1886	1920	1408	2229
Fine Arts	35	-	391	95
French	1210	136	138	721
Geographical Sciences	-	2939	11340	1718

Contd.

A. TEACHING & RESEARCH DEPARTMENTS	1986	1987	1988	1989
Geography	7761	1773	-	-
Geology and Mineralogy	6486	6997	3405	5072
German	-	-	362	80
Government	6260	6530	8036	12270
History	2939	1713	912	589
Human Movements Studies	150	2018	1088	891
Institute of Modern Languages	210	1483	501	603
Japanese	-	36	75	536
Law	382	47	255	899
Law Faculty	240	550	233	326
Management	3380	3874	6269	6062
Mathematics	22005	7607	2132	3712
Medicine	120	-	396	70
Medicine - Greenslopes	353	537	266	137
Medicine - P.A. Hospital	413	636	1909	5112
Medicine - P.A.H. Surgery	-	-	420	665
Medicine - R.B.H.	104	327	150	574
Microbiology	10903	4069	3601	5429
Music	829	261	992	241
Obstetrics and Gynaecology	12179	10882	26445	4721
Occupational Therapy	3548	2046	2930	1942
Parasitology	902	969	771	1251
Pathology	5	59	43	172
Pharmacy	1262	2589	2541	4645
Philosophy	716	346	217	294
Physics	16325	12054	8908	22494
Physiology and Pharmacology	38505	46388	57284	56472
Physiotherapy	419	65	51	3658
Psychiatry	1312	1140	4762	6006
Psychology	4255	3683	3695	5735
Regional and Town Planning	1543	2121	272	20
Schonell Education Research Centre	1122	988	2530	1480
Social and Preventive Medicine	6998	8865	17211	21821
Social Sciences Group	-	-	254	436
Social Work	1850	2033	2706	4337

Contd.

A. TEACHING & RESEARCH DEPARTMENTS	1986	1987	1988	1989
Social Work Faculty	60	-	-	40
Speech and Hearing	1639	1007	906	910
Studies in Religion	3427	1984	7842	3539
Surgery	954	621	1426	1953
Surveying	657	49	-	1953
Veterinary Science - Anatomy	188	-	-	-
Veterinary Science - Animal Production	3690	-	-	-
Veterinary Science - Animal Sciences and Production	-	3007	-	-
Veterinary Science - Companion Animal Med. & Surgery	-	-	315	405
Veterinary Science - Farm Animal Med. & Production	-	-	2391	1315
Veterinary Science - Medicine	855	1248	345	-
Veterinary Science - Pathology & Public Health	116	863	710	88
Veterinary Science - Surgery	-	180	-	-
Veterinary Science - Faculty	970	212	1284	3010
Zoology	8055	5790	3439	6212
	473730	438787	548987	627214

B. ACADEMIC SUPPORT	1986	1987	1988	1989
Audio Visual Services	1247	52608	3189	2794
Library	9083	22962	24573	23590
Counseling Services	2631	1965	4913	13949
T.E.D.I.	8861	14594	13111	16325
Printery	986	574	12558	5971
Health Services	307	22	2344	4779
Cal Unit	608	2047	4234	3049
	23723	94772	64922	70457

C. ADMINISTRATION	1986	1987	1988	1989
Central Administration	-	-	819947	982745
Buildings and Grounds	7714	2562	-	-
Business Services	347611	289694	-	-
Ceremonies Office	559	1044	-	-
Student Services	338690	454409	-	-
Enrolments	6820	6939	-	-
Information Office	16848	15563	-	-
Personnel Services	2080	4218	-	-
	720322	774429	819947	982745

D. AFFILIATED (Internal Rates)	1986	1987	1988	1989
AVCC	-	-	191	8000
Alumni Office	1235	1383	1410	1345
Anthropology Museum	-	-	93	40
AUSTA	245	174	86	-
C.A.B.H.	7114	4679	4292	2703
CITR	-	16398	16116	93845
Centre for Molecular Biology and Biotechnology	-	-	1122	1989
Emmanuel College	118	-	-	-
Heron Island Research	-	-	-	993
Kings College	140	180	-	-
P.A. Hospital	908	584	638	224
S.E.R.C.	1505	1455	898	17
U.Q. Staff Club	1613	2186	2814	2126
St. John's College	227	261	169	179
Student Computer Club	2137	937	-	-
Other Projects	67	219	371	5849
UNIQUEST	22	394	-	5116
University Foundation	34	8	97	40
University Press	10922	588	5255	8331
University Art Museum	87	174	216	43
U.Q. Staff Association	379	151	3	-

Contd.

D. AFFILIATED (Internal Rates)	1986	1987	1988	1989
Union College	1643	1705	2384	2230
U.Q. Union	1895	1589	2475	9444
University Bookshop	899	-	-	-
International House	109	-	13	-
Aust. Forum for Textile Arts	285	857	1124	1301
Aust. Studies Centre	158	-	864	54
Staff and Student Computing	-	-	582	2820
	31682	34489	41213	146689
TOTAL	\$1249457	\$1290792	\$1475069	\$1827105

PRENTICE COMPUTER CENTRE
REVENUE FROM EXTERNAL ORGANISATIONS - 1986, 1987, 1988, 1989

A. GRIFFITH UNIVERSITY	1986	1987	1988	1989
Administration				
VC Office	-	-	-	1941
Affirmative Action Office	-	-	125	6
Secretariat	41159	42165	59977	102472
Business Management	191412	238637	99754	72541
Student Affairs	18779	1310	1842	3619
Information Office	890	1448	2158	2427
ITC	890	20972	8023	13838
	252240	304532	171879	196844
Affiliated				
Alumni Office	-	-	144	-
OTAC	157010	181914	216173	210359
Faculty Staff Association	54	95	48	5
Library	5476	13337	4336	3726
Community Services	604	579	209	1
GU Student Union	240	78	4	324
GU Staff Club	54	54	-	-
	163528	196057	220914	214415
Schools				
CALT	2779	1560	2463	1692
Modern Asian Studies	5747	3187	3652	13980
Australian Environmental Studies	37546	37720	23301	8072
Science	12203	11523	11436	13291
Humanities	11969	12592	13089	11240
Administration	28549	30710	22033	22763
	98793	97292	75974	71038
TOTAL	\$514561	\$597881	\$468767	\$482297

B. OTHER EDUCATIONAL INSTITUTIONS	1986	1987	1988	1989
Brisbane CAE	436	240	20	2766
Capricornia CAE	1050	254	261	333
Darling Downs IAE	1279	1200	347	2290
James Cook University	1702	1959	863	319
Catholic Centre	1048	552	-	-
Qld Agricultural College	447	741	402	484
iversity of Adelaide	1930	3604	3128	955
High Schools and Others	1940	60	316	-
Q.U.T.	40	430	184	827
Q.I.M.R.	28175	15628	4308	3073
	36147	24668	9829	11047

C. OTHER EXTERNAL USERS	1986	1987	1988	1989
IDP	-	-	-	(Contract) 214200
Aust. Fed. of Univ. Women - Queensland	-	-	669	47
CSIRO	2699	3203	2464	463
artment of Primary Industries	585	260	20	-
Qld Water Resources Commission	210050	159718	66014	19782
Main Roads Department	5689	3246	13728	951
Education Department	15238	14193	9512	1871
Health Department	27013	23523	17011	11985
Q.E.G.B.	-	754	-	-
State Mines Department	9434	11586	10182	-
Other Commonwealth and State Departments	838	-	963	593
Consulting Engineers and Others	1702	7687	1889	4926
Mater Mothers Hospital	1556	3428	2266	420
National Parks and Wildlife Service	1344	419	487	501
Qld Spastic Welfare League	8598	2664	1109	1072
Soils Survey and Exploration Pty Ltd	530	1356	1550	40
Wildlife Preservation Society	1139	1021	449	-
Eracom Pty Ltd	432	31016	42	-
Royal Society of Qld	3441	2874	1850	1255
	289288	266948	130205	258106

APPENDIX G

SYSTEM PERFORMANCE REPORT - 1/1/89 TO 31/12/89

	<u>IBM</u> HH:MM	<u>VAX CLUSTER</u> HH:MM
Total hours system available	8760:00	8760:00
<u>Less:</u>		
Planned outage	33:27	120:30
Unplanned outage	37:10	59:45
	<hr/>	<hr/>
Actual hours system available	8689:23	8579:45
	<hr/>	<hr/>
System availability (%)	99.2	97.9

