

OFFICE OF INSTITUTIONAL RESEARCH

A FACULTY IN TRANSITION
A STUDY OF THE CHANGES IN JAMES MADISON
UNIVERSITY'S INSTRUCTIONAL FACULTY SINCE 1986

October 2001



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A Faculty In Transition

Introduction

James Madison University is a very dynamic institution. In the past 15 years JMU has experienced significant changes in many areas. The on-campus headcount increased from 9,757 in 1986 to 14,961 in 2000. Additional majors were added or expanded, including the development of the Integrated Science and Technology major in the new College of Integrated Science and Technology, the expansion of the computer-related disciplines, and the development of the Media Arts and Design major. Additional faculty have been added to meet enrollment demands for the new or expanded majors.

The Office of Institutional Research (OIR) is responsible for collecting and reporting data on JMU's faculty to the state and federal government along with organizations such as American Association of University Professors (AAUP) and the College and University Professional Association (CUPA). In 1986 OIR created an electronic database of faculty to improve the analyses of faculty data and respond to various constituencies who need to know about our faculty. This database has become a very valuable warehouse of information about faculty.

The Division of Institutional Effectiveness felt it was appropriate to review the changes in JMU's faculty to shed light on trends that could affect policy. It can help senior administrators to understand better the needs of JMU's faculty. OIR plans to update this study annually. The data on Fall 2001 faculty will be added to this report in early 2002.

Research Questions

There are many questions that could be asked about the changes in JMU's faculty. Three primary research questions are addressed by this study: Other questions may be addressed in subsequent studies.

1. How have faculty demographics (percent tenured, percent with terminal degree, race/ethnicity, gender, etc.) changed since 1986?
2. How well have faculty salaries and compensation kept up with inflation?
3. How do faculty allocate their work time? How has this changed in the last 15 years?

Methodology

The Office of Institutional Research has been reporting salary statistics to the Commonwealth of Virginia, the federal government, and to some selected outside agencies (AAUP, CUPA) since the 1970's. Beginning in 1986 these data have been kept in electronic databases. In the last year staff in OIR combined all the databases. This 15-year old database of official JMU data is an extremely valuable resource for analyzing the work of JMU's faculty and determining trends. The data are kept in Microsoft Access tables. Standard queries and reports were developed in Access to

analyze the data for this report. Data about faculty activity come from a biannual Faculty Activity Survey that has been conducted since the early 1970's. The data from the Fall 2001 survey will be added to this report in early 2002.

Results

Demographics

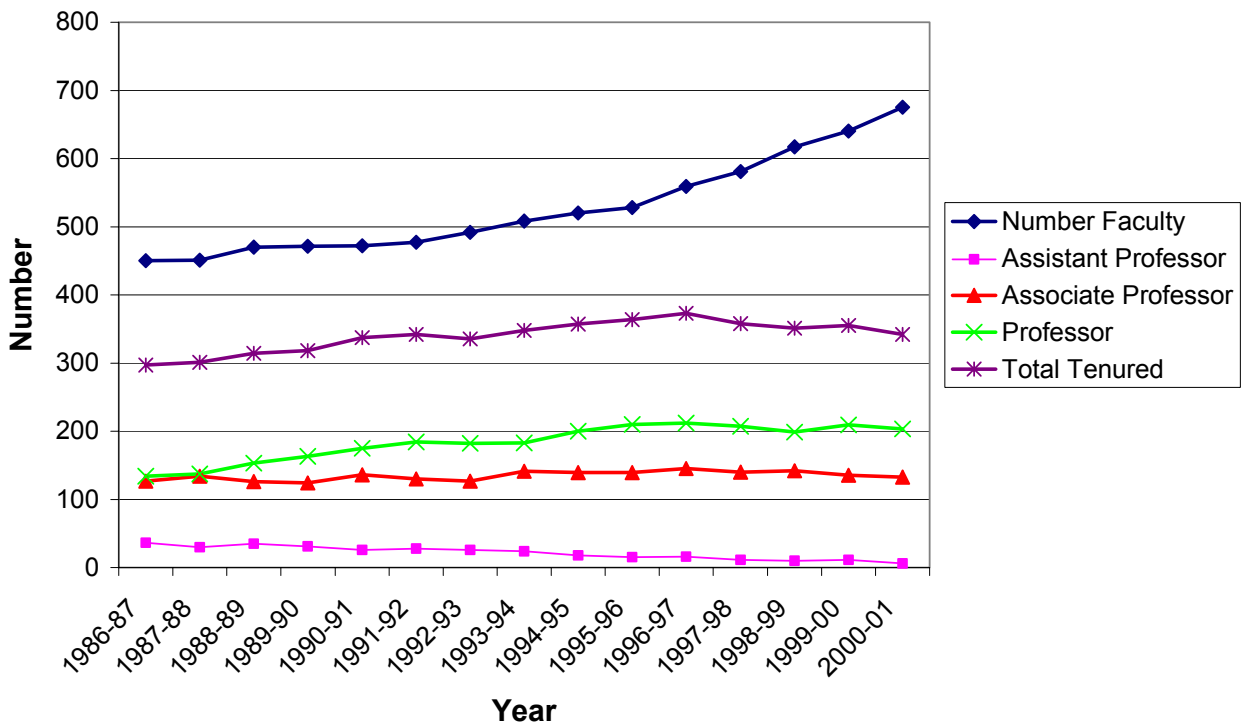
There have been some meaningful changes in the demographics of JMU's instructional faculty since 1986. This section displays tables and graphs that highlight some of these changes. Tables 1 and 2 display information about the number of faculty and tenure status. Tables 3 and 4 display information about the number of faculty who have terminal degrees. Tables 5 and 6 display the changes in gender and ethnic distributions. Table 7 displays the changes in the number of 10- and 12-month faculty. Tables 8, 9, and 10 display information about the number of years of employment and average age of the faculty.

Table 1 shows that the number of faculty increased by 50 percent between 1986 and 2000. The number of full-time equivalent students (FTES) increased by 49 percent and the number of full-time faculty per FTES remained fairly constant, but has trended toward fewer students per full-time faculty in the last few years. The percentage of faculty with tenure increased from 66 percent in 1986 to 72 percent in 1991. Since 1991 the percentage of faculty with tenure steadily decreased to 51 percent in 2000. This decrease in percent tenured is likely due to the increased number of new faculty hired in the last five years and the use of Revolving Term Appointments (RTA).

Table 1
Full-Time Instructional Faculty By Tenure Status And Per Student

Year	Number Faculty	Tenured Assistant Professor	Tenured Associate Professor	Tenured Professor	Tenured Total	Percent Tenured	Regular Session FTES	FTE Students Per Full-Time Faculty
1986-87	450	36	127	134	297	66%	9,297	20.66
1987-88	451	30	134	137	301	67%	9,617	21.32
1988-89	470	35	126	153	314	67%	10,123	21.54
1989-90	471	31	124	163	318	68%	10,365	22.01
1990-91	472	26	136	175	337	71%	10,423	22.08
1991-92	477	28	130	184	342	72%	10,620	22.26
1992-93	492	26	127	182	335	68%	10,720	21.79
1993-94	508	24	141	183	348	69%	10,711	21.08
1994-95	520	18	139	200	357	69%	10,869	20.90
1995-96	528	15	139	210	364	69%	11,087	21.00
1996-97	559	16	145	212	373	67%	12,119	21.68
1997-98	581	11	140	207	358	62%	12,877	22.16
1998-99	617	10	142	199	351	57%	13,539	21.94
1999-00	640	11	135	209	355	55%	13,697	21.40
2000-01	675	6	133	203	342	51%	13,823	20.48

Changes In Total Faculty And Tenured Faculty



As shown in Table 2, the percent of faculty tenured varies by college from a low of 39 percent in Integrated Science and Technology to a high in Education and Psychology.

Table 2
Number Of Full-Time Instructional Faculty And Tenure Status
By College, Fall 2000

College	Number Faculty	Assistant Professor	Associate Professor	Professor	Total	Percent Tenured
Arts & Letters	256	1	45	85	131	51%
Business	109	2	23	34	59	54%
Education & Psychology	97	2	22	31	55	57%
General Education	3	0	0	0	0	0%
Science & Mathematics	96	1	21	31	53	55%
Integrated Science & Technology	114	0	22	22	44	39%
Total	675	6	133	203	342	51%

**Table 3
Number And Percentage Of Faculty Holding Terminal Degree**

Year	Number of Faculty		Number With Terminal Degree		Percentage Terminal Degree		Total Percentage Holding Terminal Degree
	Male	Female	Male	Female	Male	Female	
1986-87	331	119	256	61	77%	51%	70%
1987-88	332	119	256	63	77%	53%	71%
1988-89	337	133	265	72	79%	54%	72%
1989-90	333	138	268	76	80%	55%	73%
1990-91	330	142	272	80	82%	56%	75%
1991-92	335	142	282	93	84%	65%	79%
1992-93	342	150	285	105	83%	70%	79%
1993-94	348	160	295	116	85%	73%	81%
1994-95	349	171	299	120	86%	70%	81%
1995-96	354	174	305	131	86%	75%	83%
1996-97	369	190	312	137	85%	72%	80%
1997-98	378	203	330	165	87%	81%	85%
1998-99	394	223	341	178	87%	80%	84%
1999-00	402	238	350	179	87%	75%	83%
2000-01	422	253	359	189	85%	75%	81%

**Table 4
Number And Percentage Of Faculty Holding Terminal Degree
By College, Fall 2000**

College	Number of Faculty		Number With Terminal Degree		Percentage Terminal Degree		Total Percentage Holding Terminal Degree
	Male	Female	Male	Female	Male	Female	
Arts & Letters	157	99	127	69	80.1	70.0	77%
Business	74	35	55	23	74.3	41.8	72%
Education & Psychology	47	50	45	41	95.7	82.0	89%
General Education	2	1	1	1	50.0	100.0	67%
Science & Mathematics	71	25	65	23	91.5	92.0	92%
Integrated Science & Technology	71	43	66	32	93.0	74.4	86%
Total	422	253	359	189	85%	75%	81%

The percentage of faculty holding the terminal degree increased from 70 percent in 1986 to 81 percent in 2000. The year with the highest percentage of terminal degreed instructional faculty was 1997 (85 percent). The percentage of faculty with the terminal degree varies from 72 percent in the College of Business to 89 percent in the College of Education and Psychology.

Percentage Of Faculty With Terminal Degree By Gender

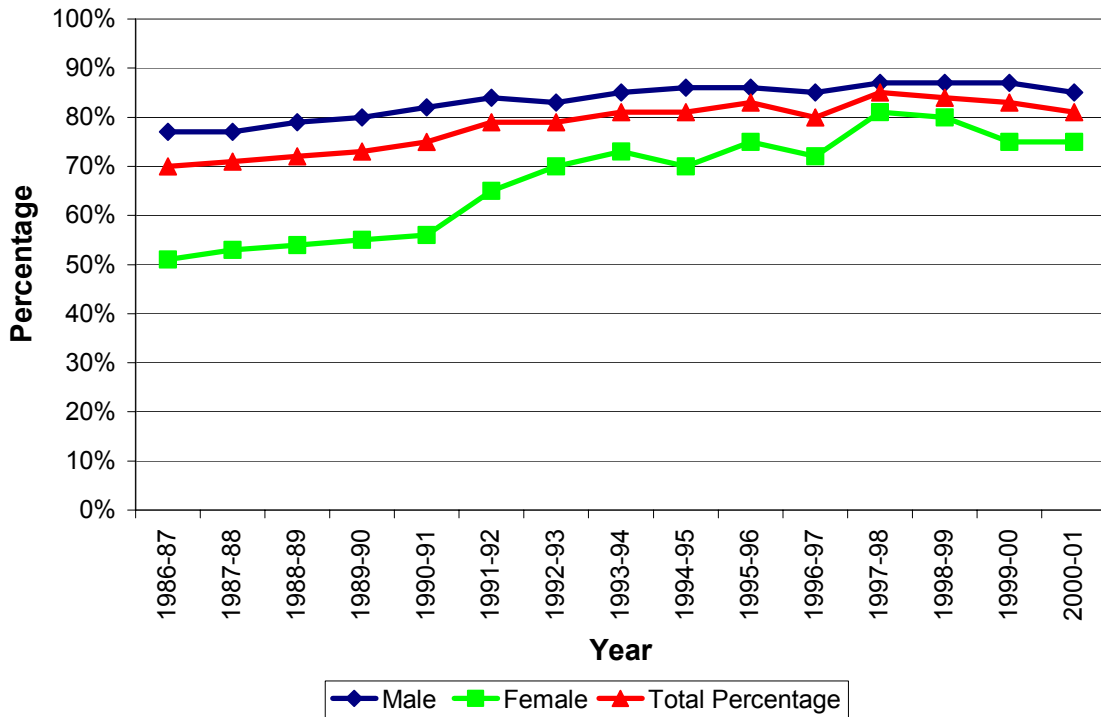


Table 5
Changes In Gender And Ethnic Origin, Instructional Faculty

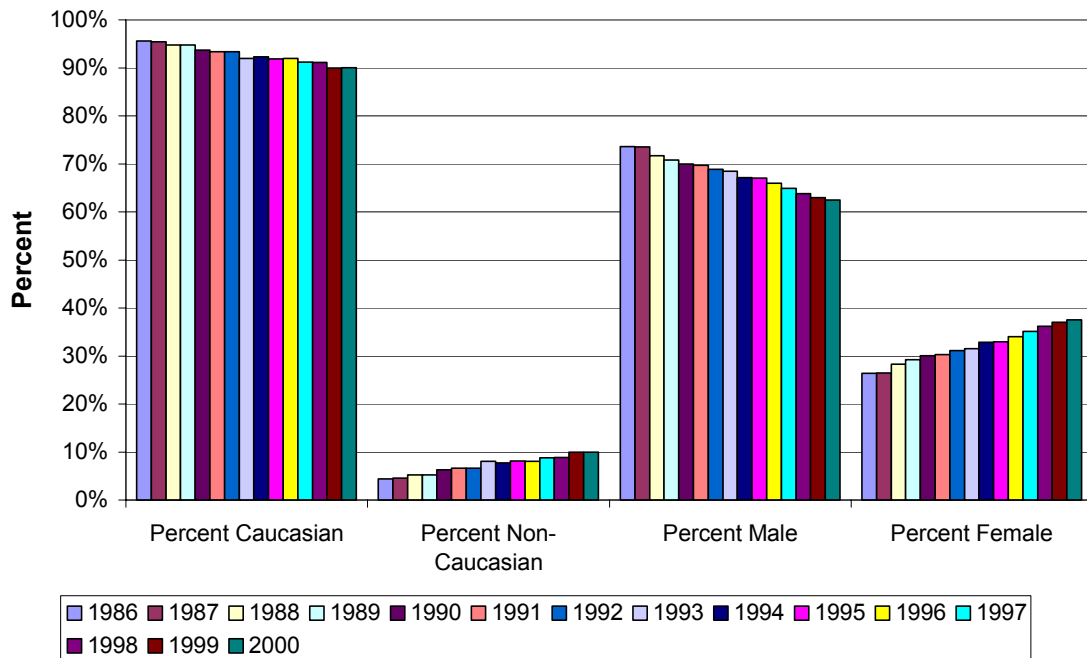
Fall	Faculty Total	Male	Female	African-American	American Indian	Asian	Caucasian	Hispanic	Unknown
1986	459	338	121	8		8	439	4	
1987	457	336	121	8		9	436	4	
1988	477	342	135	10		10	452	5	
1989	476	337	139	11		9	451	5	
1990	476	333	143	14		10	446	6	
1991	482	336	146	16		10	450	6	
1992	495	341	154	14	1	12	462	6	
1993	508	348	160	16	1	17	467	7	
1994	520	349	171	16	1	16	480	7	
1995	528	354	174	19	1	15	483	8	2
1996	559	369	190	20	2	15	512	8	2
1997	581	377	204	25	1	17	528	8	2
1998	617	394	223	24	2	20	561	9	1
1999	640	403	237	30	3	22	576	9	
2000	675	422	253	32	2	23	608	10	

Table 6
Gender And Ethnic Origin, Instructional Faculty, Fall 2000

College	Faculty Total	Male	Female	African-American	American Indian	Asian	Caucasian	Hispanic	Unknown & NRA
Arts & Letters	256	157	99	12	0	8	225	8	3
Business	109	74	35	9	1	6	93	0	0
Education & Psychology	97	47	50	6	1	0	88	1	1
General Education	3	2	1	0	0	0	2	0	1
Science & Mathematics	96	71	25	0	0	4	90	0	2
Integrated Science & Technology	114	71	43	4	0	3	105	1	1
Total	675	422	253	31	2	21	603	10	8

College	Faculty Total	Male	Female	African-American	American Indian	Asian	Caucasian	Hispanic	Unknown & NRA
Percentages									
Arts & Letters	256	61%	39%	5%	0%	3%	88%	3%	1%
Business	109	68%	32%	8%	1%	6%	85%	0%	0%
Education & Psychology	97	48%	52%	6%	1%	0%	91%	1%	1%
General Education	3	67%	33%	0%	0%	0%	67%	0%	33%
Science & Mathematics	96	74%	26%	0%	0%	4%	94%	0%	2%
Integrated Science & Technology	114	62%	38%	4%	0%	3%	92%	1%	1%
Total	675	63%	37%	5%	0%	3%	89%	1%	1%

Changes In Gender And Ethnic Origin



The JMU faculty is more diverse than in 1986. The percentage of non-Caucasian faculty increased from four percent in 1986 to 10 percent in 2000. At the same time the percentage of female faculty increased from 26 to 37 percent.

In 1987 the months in which department heads were contractually employed increased from 10 to 12 months. In 1987 7.2 percent of all instructional faculty were employed 12 months. By 2000 this had changed to 6.5 percent.

Table 7
Changes In 10- And 12-Month Instructional Faculty

Fall	10-Month				12-Month			
	Professor	Associate Professor	Assistant Professor	Instructor	Professor	Associate Professor	Assistant Professor	Instructor
1986	137	149	126	38	0	1	0	2
1987	123	142	119	40	18	10	1	4
1988	132	137	130	39	26	7	2	4
1989	138	137	117	41	28	10	3	2
1990	150	140	110	35	27	11	2	1
1991	156	134	114	37	31	7	1	2
1992	151	130	132	42	32	5	2	2
1993	160	145	128	37	27	6	3	2
1994	172	146	129	31	30	8	1	3
1995	183	150	129	27	28	7	2	2
1996	186	163	136	35	27	8	2	2
1997	184	173	153	39	26	4	2	0
1998	180	184	178	46	23	3	3	0
1999	183	174	188	51	30	4	10	0
2000	180	177	218	56	28	6	9	1

In the last five years an influx of new faculty resulted from many senior faculty retiring and an increase in new positions for enrollment growth. When compared with ten years ago, the profile of the faculty years in service at JMU has changed. In 1990 32 percent of the faculty had five years or less experience. The average number of years was 11.6. In 2000 49 percent had five years or less experience and averaged 9.9 years. Given the retirements in Spring 2001 and those expected in Spring 2002, the faculty will increasingly have less experience at JMU. As shown in Table 9, however, the average age of the faculty has changed very little since 1990.

**Table 8
Years Employed At JMU**

Years Employed	1990-91	2000-01
New	33	84
1-5	121	246
6-10	72	91
11-15	83	70
16-20	88	51
21-25	53	66
26-30	19	50
31+	7	17
Average Years	11.6	9.9
Total	476	675

**Changes In Percentage Of Faculty By Years At JMU
1990-91 And 2000-01**

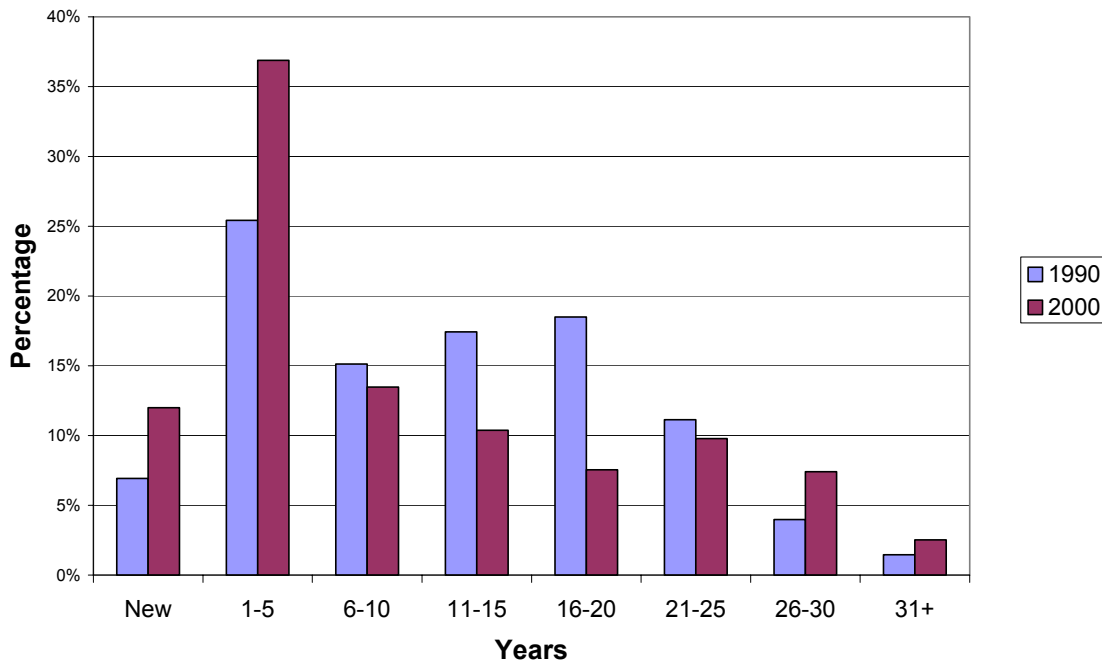


Table 9
Years Employed At JMU And Average Age
By College, Fall 2000

Years Employed	Arts & Letters	Business	Education & Psychology	General Education	Science & Mathematics	Integrated Science & Technology	Total
New	39	12	8	3	12	10	84
1-5	88	35	39	0	30	54	246
6-10	25	14	17	0	10	25	91
11-15	27	21	5	0	9	8	70
16-20	19	15	5	0	7	5	51
21-25	19	12	14	0	12	9	66
26-30	31	0	9	0	7	3	50
31+	8	0	0	0	9	0	17
Average Years	10.4	9.5	10.4	2.7	12.1	7.1	9.9
Average Age	46.2	46.0	47.9	50.7	46.6	48.7	46.8
Percent 5 Years Or Less	49.6%	43.1%	48.5%	100.0%	43.8%	56.1%	48.9%
Total	256	109	97	3	96	114	675

Table 9 compares the average years at JMU and average age for the Fall 2000 colleges. The faculty have less JMU history than ten years ago. The average number of years at JMU varies from 7.1 in the College of Integrated Science and Technology to 12.1 in the College of Science and Mathematics. The average age varies from 46.0 years in the College of Business to 48.7 in CISAT. Fifty-six percent of the CISAT faculty have been at JMU five years or less.

Table 10
Average Number Of Years At JMU And Average Age

YEAR	Headcount	JMU Years	Average Age	Average Age Of New Faculty
1986-87	459	9.9	44.4	38.0
1987-88	457	10.5	44.9	35.3
1988-89	477	10.6	45.3	37.0
1989-90	476	11.2	45.7	34.8
1990-91	476	11.6	46.5	39.8
1991-92	482	12.0	46.8	35.7
1992-93	495	11.1	46.3	38.3
1993-94	508	11.5	46.7	38.5
1994-95	520	12.0	47.2	38.4
1995-96	528	12.1	47.5	37.7
1996-97	559	11.8	47.5	38.7
1997-98	581	11.2	47.3	38.4
1998-99	617	10.3	46.9	39.4
1999-00	640	10.4	47.2	38.7
2000-01	675	9.9	46.8	37.7

Each year JMU hires many new faculty. How long do they tend to remain at JMU? Table 11 displays the number of new assistant professors hired since 1986. All but one was hired into tenure track positions. Between 1986 and 1993, 60 percent of those hired were employed seven years later. These statistics were similar to a study conducted at the University of Wisconsin on new assistant professors faculty.

**Table 11
Retention Of New Tenure Track Assistant Professors**

	Begin	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	Percent Retained 7 Years
Fall									
1986	13	12	11	10	10	9	8	8	62%
1987	8	8	8	7	6	5	5	3	38%
1988	13	13	11	10	10	10	10	8	62%
1989	7	7	7	6	6	6	6	6	86%
1990	12	12	12	12	12	11	10	9	75%
1991	11	10	10	8	7	7	7	5	45%
1992	17	16	14	12	12	11	11	11	65%
1993	13	13	11	10	12	11	8	6	46%
1994	12	12	9	9	8	8	7		
1995	16	15	14	10	9	8			
1996	7	5	6	6	6				
1997	15	12	10	10					
1998	19	18	18						
1999	18	18							
Percent Retained		94%	87%	76%	76%	70%	68%	60%	

How qualified are the new faculty? One measure of faculty qualifications is the percent that hold a terminal degree in their field. Table 12 displays the number of new faculty and percentage with a terminal degree by rank. A small percentage of instructors have a terminal degree. More than 75 percent of new assistant professors hold a terminal degree while more than 90 percent of new professors and associate professors hold the terminal degree. The overall percentage with a terminal degree varied from a low of 38 percent in 1991 to a high of 76 percent in 1998. No discernable trends are apparent.

Table12
New Faculty Holding Terminal Degree

Fall	Instructor		Assistant		Associate		Professor		All Ranks	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent
1986	18	6%	22	68%	7	100%	4	100%	51	53%
1987	10	0%	17	82%	3	100%	1	100%	31	58%
1988	17	0%	22	73%	5	80%	2	100%	46	48%
1989	10	0%	13	85%	2	100%	2	100%	27	56%
1990	9	0%	17	53%	3	100%	4	100%	33	48%
1991	17	6%	14	79%	1	0%	0	0%	32	38%
1992	23	17%	38	76%	3	100%	4	100%	68	59%
1993	10	10%	20	80%	7	100%	4	100%	41	68%
1994	8	25%	24	75%	3	100%	3	100%	38	68%
1995	16	19%	37	86%	6	100%	3	100%	62	71%
1996	15	20%	34	79%	10	90%	1	0%	60	65%
1997	13	23%	44	91%	12	83%	3	33%	72	75%
1998	13	23%	62	84%	10	90%	4	100%	89	76%
1999	6	0%	42	71%	7	86%	3	100%	58	67%
2000	10	10%	57	63%	13	92%	1	100%	81	62%
All Years	195	11%	463	77%	92	91%	39	92%	789	63%

Compensation

The tables and graphs in this section focus on how well faculty have been compensated since 1986. Table 13 displays the average salary by rank by year. The average salary increased by 73 percent while the Consumer Price Index increased by 62 percent. Table 14 displays total compensation (salary + benefits) since 1986. Total compensation increased by 73 percent. In both tables the percentage increases since 1986 varied by rank. The average salary and compensation increase the most for professors and instructors. Assistant professor salaries and total compensation had the smallest percentage increases. However, Table 15 gives a much different perspective on salary increases. Table 15 shows the percent increases for continuing faculty. Continuing assistant professors had greater percentage salary increases than professors and associate professors in all but two years since 1986. Although professors have the highest average salary and compensation, their overall percentage increases tended to be smaller than associate or assistant professors.

**Table 13
Average Salary By Rank**

Year	Professor	Associate Professor	Assistant Professor	Instructor	All Ranks	Percent Change
1986-87	39,389	33,818	29,341	21,555	33,225	--
1987-88	42,499	36,420	31,052	23,547	35,647	7.3%
1988-89	46,235	39,246	33,435	25,607	38,724	8.6%
1989-90	50,261	42,935	36,917	27,943	42,618	10.1%
1990-91	51,698	44,177	37,768	29,398	44,329	4.0%
1991-92	50,829	43,791	36,596	28,603	43,576	-1.7%
1992-93	50,958	43,650	35,296	29,113	42,800	-1.8%
1993-94	52,135	44,674	36,558	28,506	44,086	3.0%
1994-95	55,254	47,439	39,017	30,866	47,286	7.3%
1995-96	56,991	48,235	40,415	31,180	48,857	3.3%
1996-97	59,158	49,899	40,711	32,069	49,979	2.3%
1997-98	62,312	53,371	43,038	33,604	52,519	5.1%
1998-99	66,342	55,943	44,418	34,622	54,394	3.6%
1999-00	70,206	58,818	46,009	36,407	56,859	4.5%
2000-01	72,223	59,695	46,518	39,359	57,407	1.0%
Percent Increase	83%	77%	59%	83%	73%	

**Table 14
Total Compensation By Rank**

Year	Professor	Associate Professor	Assistant Professor	Instructor	All Ranks	Percent Change	Benefits As Percent Of Salary
1986-87	49,019	42,281	36,874	27,428	41,564	--	25.1
1987-88	52,772	45,464	38,999	29,924	44,525	7.1%	24.9
1988-89	57,153	48,790	41,802	32,355	48,146	8.1%	24.3
1989-90	62,410	53,820	46,581	35,746	53,358	10.8%	25.2
1990-91	65,579	56,530	48,729	38,503	56,677	6.2%	27.9
1991-92	63,107	54,723	45,909	36,747	54,418	-4.0%	24.9
1992-93	62,784	54,367	44,698	37,443	53,359	-1.9%	24.7
1993-94	64,594	55,995	46,615	37,108	55,291	3.6%	25.4
1994-95	68,010	59,039	49,295	39,675	58,822	6.4%	24.4
1995-96	70,286	60,351	49,902	39,982	60,974	3.7%	24.8
1996-97	72,818	62,219	51,343	41,139	62,178	2.0%	24.4
1997-98	77,058	66,706	54,563	43,357	65,641	5.6%	25.0
1998-99	82,737	70,425	56,646	44,959	68,535	4.4%	26.0

Year	Professor	Associate Professor	Assistant Professor	Instructor	All Ranks	Percent Change	Benefits As Percent Of Salary
1999-00	88,083	74,515	59,096	47,557	72,113	5.2%	26.8
2000-01	91,232	76,248	60,248	51,548	73,399	1.8%	27.9
Percent Increase	86%	80%	63%	88%	77%		

Faculty Salaries By Rank

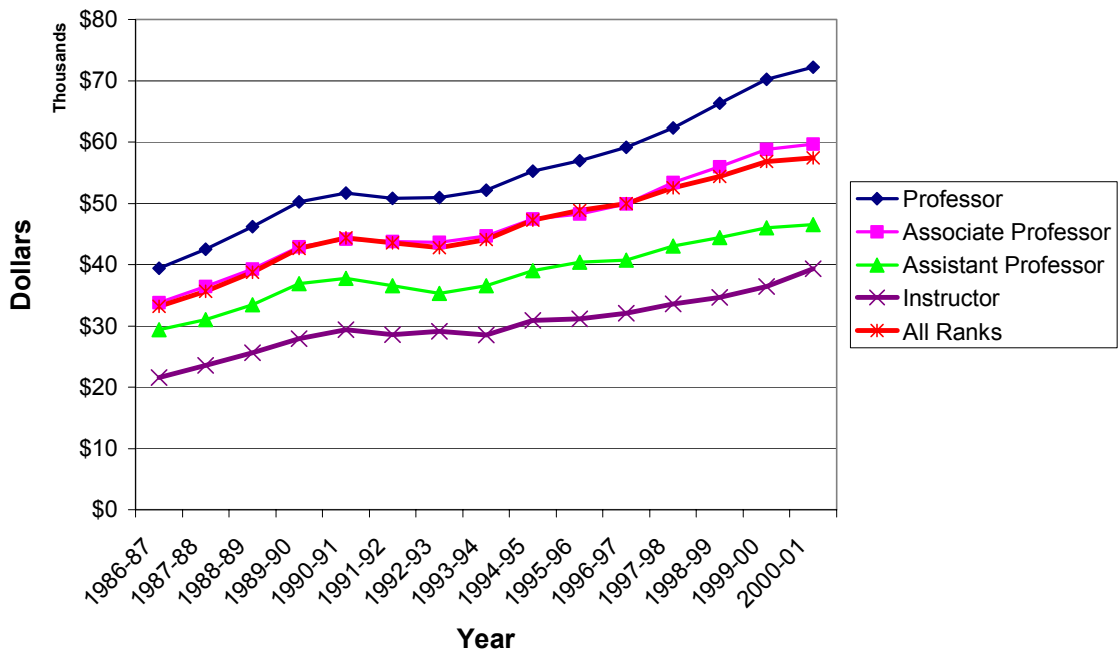
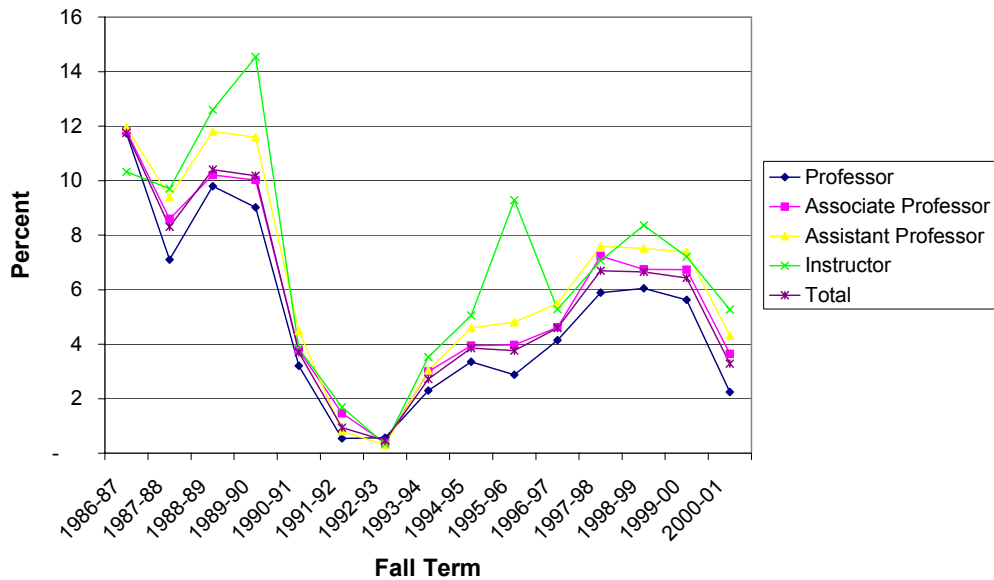


Table 15
Percent Salary Increases For Continuing¹ Faculty

Fall	Professor	Associate Professor	Assistant Professor	Instructor	Total
1986-87	11.74	11.81	11.95	10.32	11.75
1987-88	7.10	8.60	9.40	9.70	8.30
1988-89	9.80	10.20	11.80	12.60	10.40
1989-90	9.01	10.02	11.59	14.54	10.18
1990-91	3.21	3.78	4.49	3.84	3.69
1991-92	0.54	1.47	0.81	1.69	0.94
1992-93	0.57	0.38	0.31	0.33	0.46
1993-94	2.30	3.00	3.03	3.52	2.72
1994-95	3.35	3.95	4.59	5.06	3.85
1995-96	2.88	3.98	4.80	9.28	3.76
1996-97	4.15	4.62	5.49	5.28	4.59
1997-98	5.89	7.23	7.59	7.06	6.69
1998-99	6.05	6.75	7.51	8.35	6.65
1999-00	5.63	6.73	7.38	7.21	6.43
2000-01	2.24	3.64	4.32	5.27	3.29

Continuing Faculty Salary Increases By Rank



¹ Faculty who were employed the previous year. Faculty who were promoted were analyzed as if they were in the previous rank. For example, an associate professor who was promoted to professor was analyzed as an associate professor with the new salary.

Faculty Activity

The Office of Institutional Research has conducted Faculty Activity Surveys since 1973. The purpose of the surveys is to determine how faculty allocate their time in various activities. The value in these surveys is to help communicate to JMU's various publics how faculty allocate their time. In tables 16 and 17 the results of these surveys is displayed since 1974. The average number of hours spent by faculty during a typical week has varied only slightly from 52.4 hours to 56.0 hours. The value comes in reviewing the percentage distribution of effort over the years. As shown in Table 17, faculty devoted a higher percentage of their time to instructional activity in 2000 (70.1 percent) than in 1974 (56.0 percent). The percentage of time devoted to research/scholarly activity, public service, academic support, and student support decreased from 1974. These data appear to indicate that faculty did not work any more hours in 2000, but that their effort is increasingly focused on instructional activities.

Table 18 displays the percentage of time devoted to different activities by college. There was little variance between colleges.

In the next publication of this document the Fall 2001 Faculty Activity Results will be displayed. An analysis will be conducted of the time devoted to different activities based on the number of years at JMU. For example, are non-tenured faculty spending their time differently than tenured faculty?

Table 16
Average Hours By Type Of Activity

Year	Respondents	Class Meet	Class Prep.	Other Instruction	Total Instruction	Research/Scholarly	Public Service	Academic Support	Student Support	Institutional Support	Total
1974	315	12.9	16.5	2.0	31.4	5.2	6.3	5.8	2.5	4.8	56.0
1976	369	11.8	17.1	5.5	34.4	7.6	2.2	4.6	3.3	2.7	54.8
1978	403	12.2	17.2	4.8	34.2	8.7	2.2	4.5	1.8	3.2	54.6
1981	421	12.0	16.3	4.5	32.8	8.3	2.2	4.1	1.9	3.0	52.3
1985	419	11.4	15.3	4.6	31.3	9.4	2.4	4.5	1.9	2.9	52.4
1987	437	10.7	15.1	5.0	30.9	10.7	2.2	4.9	1.8	3.4	53.8
1988	452	11.0	14.6	7.2	32.7	9.5	1.9	4.6	1.7	3.8	54.3
1991	467	10.5	17.9	5.0	33.4	9.5	1.8	4.3	1.6	3.4	54.0
1993	483	10.3	18.2	4.7	33.2	9.9	1.8	4.9	1.0	2.8	53.5
1995	493	10.6	18.1	4.6	33.3	10.0	1.5	4.8	1.1	2.9	53.7
1997	495	10.0	15.2	11.7	36.9	9.5	1.4	3.9	0.7	2.7	55.2
1999	457	9.0	17.0	12.9	38.9	7.7	1.5	3.0	0.7	3.2	55.1

Table 17
Percent Of Total Time By Type Of Activity

Year	Respondents	Class Meet	Class Preparation	Other Instruction	Total Instruction	Research/Scholarly	Public Service	Academic Support	Student Support	Institutional Support	Total
1974	315	23.0	29.4	3.6	56.0	9.2	11.3	10.4	4.5	8.6	100.0
1976	369	21.6	31.2	10.0	62.8	13.9	4.0	8.4	6.0	4.0	100.0
1978	403	22.4	31.4	8.7	62.5	15.9	4.1	8.2	3.4	5.9	100.0
1981	421	22.9	31.1	8.7	62.7	15.9	4.1	7.9	3.7	5.7	100.0
1985	419	21.8	29.2	8.8	59.8	17.9	4.6	8.6	3.6	5.5	100.0
1987	437	19.9	28.0	9.4	57.4	19.9	4.1	9.0	3.3	6.3	100.0
1988	452	20.3	26.8	13.2	60.3	17.5	3.5	8.5	3.2	7.0	100.0
1991	467	19.5	33.2	9.2	61.9	17.6	3.3	7.9	2.9	6.3	100.0
1993	483	19.2	34.0	8.8	62.0	18.4	3.3	9.1	1.9	5.2	100.0
1995	493	19.8	33.7	8.6	62.1	18.7	2.8	9.0	2.1	5.3	100.0
1997	495	18.1	27.6	21.2	66.9	17.2	2.6	7.1	1.4	4.8	100.0
1999	457	16.2	30.7	23.2	70.1	14.1	2.7	5.6	1.2	6.4	100.0

Table 18
Percent Of Total Time By Type Of Activity
By College, Fall 1999

College	Respondents	Class Meet	Class Preparation	Other Instruction	Total Instruction	Research/Scholarly	Public Service	Academic Support	Student Support	Institutional Support	Total
Arts & Letters	151	18.0	32.0	21.8	71.8	16.2	1.9	4.6	1.7	3.7	100.0
Business	70	15.5	32.3	19.3	67.0	15.0	4.2	5.2	2.4	6.1	100.0
Education & Psychology	65	16.3	27.4	27.3	71.1	11.5	3.6	7.0	1.3	5.5	100.0
Science & Mathematics	72	19.3	29.3	22.1	70.7	17.1	2.2	5.9	0.6	3.5	100.0
Integrated Science & Technology	92	17.8	29.5	24.8	72.2	13.7	3.3	6.2	1.0	3.6	100.0
Other	7	10.2	33.9	23.6	67.7	11.1	0.7	4.6	0.0	15.8	100.0
Total	457	16.2	30.7	23.2	70.1	14.1	2.7	5.6	1.2	6.4	100.0

Percent Of Faculty Time By Activity

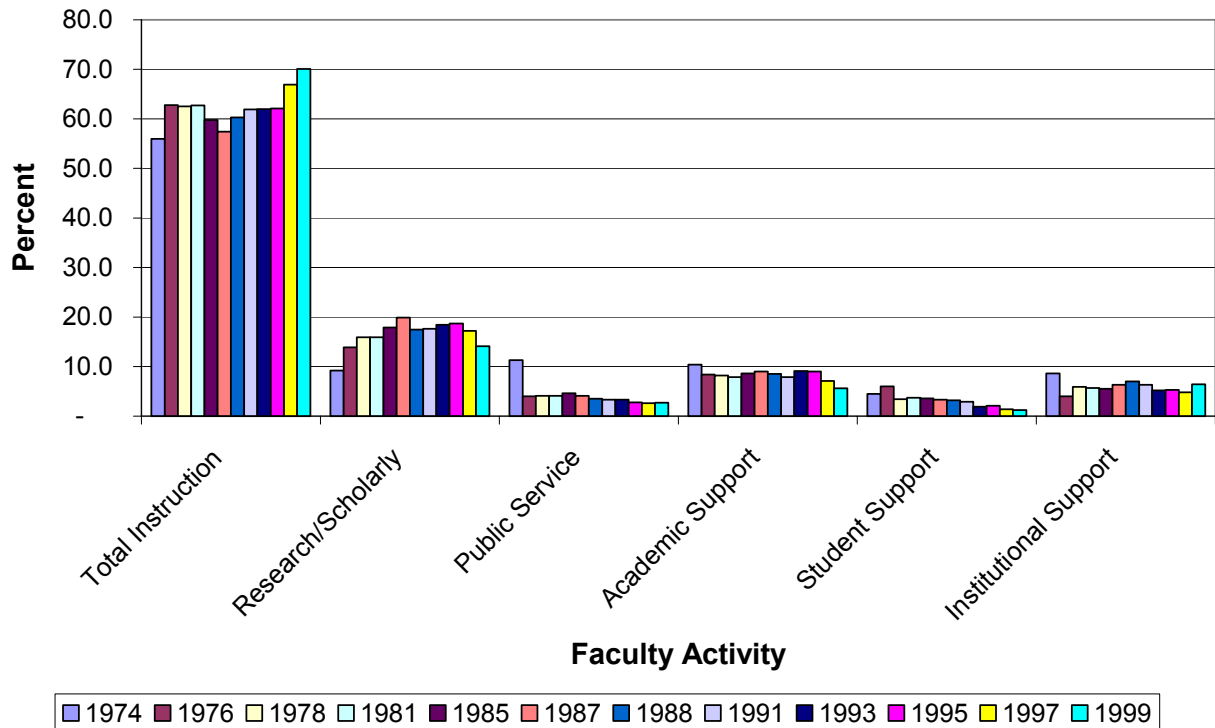


Table 19 displays four measures of faculty resources and use. Each measure is described and analyzed below.

- The “Student-To-Faculty Ratio” is calculated by dividing the full-time equivalent students (15 credits per undergraduate and 12 per graduate student) by the full-time equivalent faculty (FTEF). This is not a measure of average class size. Since 1991 the ratio has varied from a high of 19.2 in 1997 to 17.5 in 2000.
- The “Total Student Credit Hours Per Full-Time Equivalent Faculty” figures represent the total number of credit hours taught divided by the total FTE faculty. This number has varied from a high of 284.8 in 1997 to a low of 260.3 in 2000.
- The “Percent of Total Fall Credit Hours Taught By Full-Time Faculty” seeks to explore the distribution of total effort between full-time and part-time faculty. The percent ranged from a high of 79.8 in 1999 to 77.1 in 1993. In 2000 the percent was 78.6.
- The “Percent Of Lower Division Student Course Enrollments Taught By Full-Time Faculty” figures are calculated for SCHEV’s Reports of Institutional Effectiveness.” SCHEV is concerned about how the public institutions in Virginia use their faculty to

instruct freshmen and sophomores. The analyses are calculated by section and subsection. Individualized instruction is not included. Section is defined as an organized course offered for credit and not a subsection such as a laboratory or discussion session. Sections also include mass sections. For example, a Biology 130 lecture is typically taught by one faculty member, but is listed in the schedule of classes as four sections to assign students to labs. The section analysis combines the lab sections, counting them as one lecture section. So, the same Biology 130 course has four subsections. The percent for sections ranged from 76.4 to 73.7. The percent for subsections ranged from 82.9 percent to 75.2.

The Division of Academic Affairs analyses faculty resource use by department and college. Questions about the relative distribution of resources and use should be directed to Academic Affairs.

Table 19
Measures Of Faculty Resources And Use
Fall 1991 To Fall 2000

Fall	Student-To-Faculty Ratio ²	Total Student Credit Hours Per Full-Time Equivalent Faculty	Percent Of Total Fall Credit Hours Taught By Full-Time Faculty	Percent Of Lower Division Student Course Enrollments Taught By Full-Time Faculty	Regular Session (Fall + Spring) FTE Students
1991	18.9 : 1	281.2	78.5%	Section / Subsection	10,620
1992	18.3 : 1	271.6	79.5%	NA	10,720
1993	18.2 : 1	270.2	77.7%	NA	10,711
1994	18.3 : 1	271.5	77.1%	NA	10,869
1995	18.8 : 1	279.0	79.6%	NA	11,087
1996	19.1 : 1	283.7	79.5%	75.9% / 82.9%	12,119
1997	19.2 : 1	284.8	78.2%	74.3% / 77.5%	12,877
1998	18.8 : 1	279.8	79.6%	76.4% / 75.3%	13,539
1999	18.3 : 1	272.0	79.8%	75.7% / 75.2%	13,697
2000	17.5 : 1	260.3	78.6%	73.7% / 75.2%	13,823

Summary

This study of instructional faculty was designed to explore the ways the JMU faculty have changed since 1986 and provide useful information to the university community. As a result of these analyses, several important trends have emerged.

² Beginning with Fall 1996, Student-To-Faculty Ratios are calculated by the methodology of prior years and will vary slightly from the annual statistical summaries published by the Office of Institutional Research. The revised methodology was adopted by Academic Council to satisfy SCHEV definitions.

- The number of full-time faculty has grown in proportion to increases in students, but the percentage of faculty with tenure has decreased significantly in the last five years to 51 percent. In the last four years the number of full-time faculty per FTE student has decreased by more than 1.5.
- The JMU faculty is more highly degreed than in 1986. The percentage of faculty holding the terminal degree increased from 70 percent in 1986 to 81 percent in 2000.
- The JMU faculty is more diverse than in 1986. Non-Caucasian faculty increased from four percent in 1986 to ten percent in 2000. Women now constitute 37 percent of faculty, up from 26 percent in 1986.
- The JMU faculty are more likely to have come to JMU in the last five years. Almost half (49 percent) of faculty has five years or less experience at JMU. This compares with 32 percent in 1990. The average number of years experience declined from an average of 11.6 in 1990 to 9.9 in 2000. This average is expected to decline in 2001 and 2002.
- Approximately 60 percent of new tenure-track assistant professors are still employed by JMU after seven years.
- The average faculty salary increased by 73 percent since 1986, compared with 62 percent for the Consumer Price Index. Total compensation (salary + benefits) increased by 77 percent. The average salaries of all assistant professors (new plus continuing) have grown at the lowest rate since 1986, but the salaries of continuing assistant professors have grown at a higher rate than professors and associate professors. Professors have the highest average salaries, but the annual percentage increases for continuing professors are the lowest of all ranks.
- The typical JMU faculty member spends a higher percentage of his or her time in instructional activities than 25 years ago. The average faculty member works 55 hours per week, which has changed little since 1974. However, the typical faculty member devotes 70 percent of his or her total hours to instruction, up from 60 percent in 1986 and 56 percent in 1974.
- The most recent student-to-faculty ratio, 17.5:1 is the lowest in the last ten years, down from 19.2:1 in 1997.

Important Questions

Changes of the type described in this report usually present opportunities and challenges. The staff in the Division of Institutional Effectiveness have developed questions that might be worth considering in light of the information provided. Below are several important questions that have been raised by this study:

- With the curricular and programmatic changes at JMU over the past 15 years, are we satisfied with the percentage of faculty that holds terminal degrees? It appears that the increases have come with the female faculty.
- What conclusions can we draw from the changes in gender and ethnic origin of instructional faculty? Can we conclude that our recruitment efforts have achieved the desired results?
- What opportunities/threats do we see for the culture of the faculty as a result of the changing employment patterns at JMU? What do we anticipate the profile will be in 2008, and are we making strategic decisions based on that anticipated profile?
- Based on our anticipated hiring plans, what do we think the average number of years and age of our faculty will be in 2008? What are the opportunities and threats we will face?
- Are we satisfied with the strategic salary plan? How do we anticipate the data will change in the next several years?
- For the years 1997 and 1999 faculty report fewer hours on research and scholarly activity. If this trend continues, what does this say about JMU in 2008?
- In the years 1995, 1997, and 1999 faculty report spending fewer hours on student support. If this trend continues, what does this say about JMU in 2008?
- In the years 1995, 1997, and 1999 faculty report spending fewer hours on academic support. If this trend continues, what does this say about JMU in 2008?

OIR will update this report annually to provide an ongoing summary of changes in JMU's faculty. Questions about this study can be directed to the JMU Office of Institutional Research at (540) 568-6830 or ASK-OIR@JMU.EDU.