

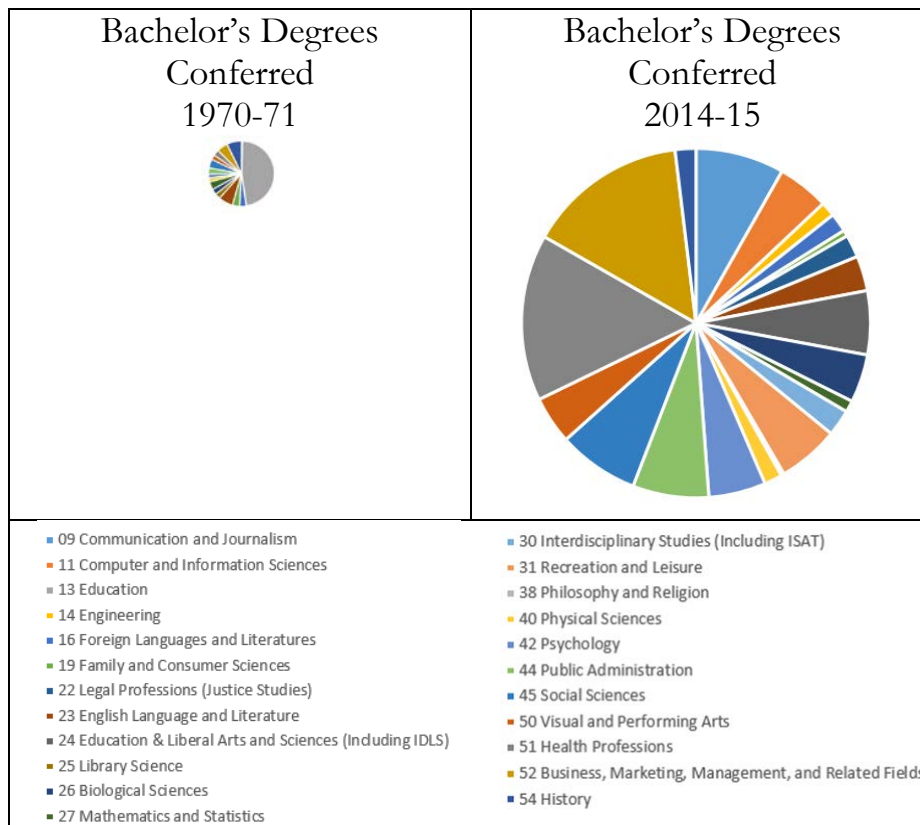
Oh How We've Changed: JMU Graduation Outcomes Since 1970-71

Change at institutions similar to JMU in size and complexity is typically incremental and takes years to be recognized and understood. From year to year, the number of graduates by program changes; periodically new majors are added or retired due to demand and need. When one reviews data covering more than 40 years at JMU, the magnitude of change due to increased diversity, size, and the need to prepare individuals for the quickly changing world are apparent. The purpose of this Research Note is to highlight these dramatic transformations by examining the changes in degrees conferred by major area since 1970-71. These changes in disciplines offered mirror the changes in America and the world, including a more diverse population and the needs of the modern workplace.

Former JMU President Ronald Carrier is writing a book on changes in higher education. He requested assistance from OIR to research our historical files to find data that show the magnitude of change since he assumed the JMU presidency in 1971. The tables and graphs contained herein are designed to display some of these changes that occurred while he and his successors, Dr. Linwood Rose, and current President Jonathan Alger, have served JMU.

Degrees Conferred by Discipline Since 1970-71

The graduation data were gathered from official historical documents (Catalogs, Statistical Summaries, etc.) and databases maintained by OIR. These data were organized by major discipline areas displayed below. The two pie charts represent the relative number of degrees conferred and the distribution of degrees conferred between 1970-71 and 2014-15.



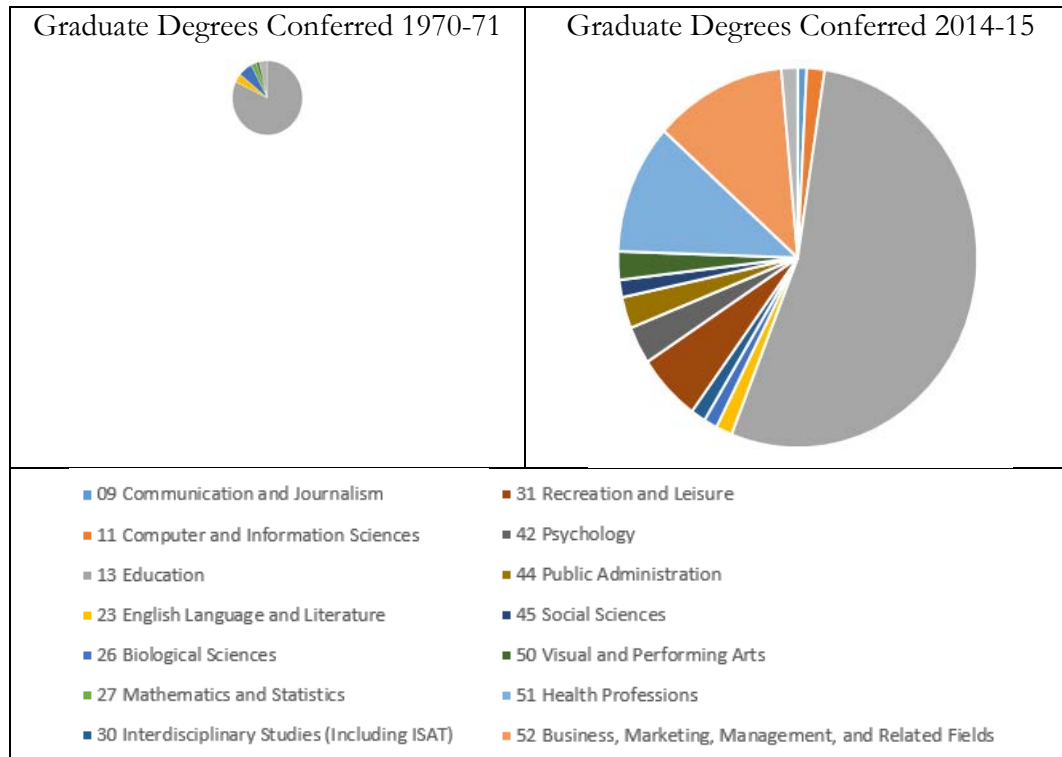
In 1970-71, the education discipline had the largest number of graduates (324 / 47.2%). This number reflected Madison's historical roots as the State Normal and Industrial School for Women at Harrisonburg and the mission of what was then named Madison College. This author's mother graduated from Madison in 1933 with a two-year teaching certificate and was a teacher for more than 40 years in Albemarle County.

In 2014-15 JMU enrollment is seven times larger and is far more diverse both ethnically and by gender. The discipline category that now has the greatest number and percentage of graduates is health professions (706 / 15.4%) and business (679 / 14.8%). JMU still prepares many students to become teachers (546 teacher education endorsements in 2013-14). However, at the undergraduate level these students can no longer major in education, but rather are required to earn a degree in a program like Interdisciplinary Liberal Studies (IDLS), which provides a very broad education in many disciplines.

The table below displays the number of degrees conferred (including second majors) in five-year increments since 1970-71 at the undergraduate, graduate (master's and educational specialist), and doctoral levels. In 1970-71 Madison College did not offer educational specialist or doctoral degrees.

Career	CIP 2-Digit	Disciplines	7071	7576	8081	8586	9091	9596	0001	0506	1011	1415
Undergrad	09	Communication and Journalism	3	39	148	180	176	198	286	311	391	376
	11	Computer and Information Sciences			35	270	146	143	321	114	138	219
	13	Education	324	437	372	193	207	2	6	4		
	14	Engineering										62
	16	Foreign Languages and Literatures	22	18	17	41	75	65	65	33	54	80
	19	Family and Consumer Sciences	24	56	45	38	33	28	20	22	37	26
	22	Legal Professions (Justice Studies)									90	96
	23	English Language and Literature	49	31	32	78	129	177	180	207	171	148
	24	Education & Liberal Arts and Sciences (Including IDLS)			15	9	18	20	17	169	239	271
	25	Library Science	18	25	10	54	3					
	26	Biological Sciences	19	67	47	55	58	127	76	122	166	204
	27	Mathematics and Statistics	27	31	24	37	23	20	26	52	41	49
	30	Interdisciplinary Studies (Including ISAT)							175	119	107	112
	31	Recreation and Leisure						32	92	171	234	260
	38	Philosophy and Religion		5	8	5	10	11	28	50	25	13
	40	Physical Sciences	13	13	54	29	38	58	38	53	66	76
	42	Psychology	14	70	99	103	194	262	250	252	212	242
	44	Public Administration	21	54	64	34	46	63	57	84	86	323
	45	Social Sciences	30	119	149	203	359	382	351	462	372	344
	50	Visual and Performing Arts	16	40	60	72	111	158	203	271	247	202
51	Health Professions	20	89	58	74	82	207	258	357	529	706	
52	Business, Marketing, Management, and Related Fields	37	232	403	609	673	465	719	823	636	679	
54	History	49	27	13	30	69	80	66	91	115	88	
	Total	686	1,353	1,653	2,114	2,450	2,498	3,234	3,767	3,956	4,576	
Grad	09	Communication and Journalism										6
	11	Computer and Information Sciences					1	7	44	21	20	12
	13	Education	64	107	205	121	82	179	136	303	367	401
	23	English Language and Literature	3	7	8	6	10	8	15	10	17	11
	26	Biological Sciences	5		7		2	5	3	7	7	9
	27	Mathematics and Statistics	2	3	6	1	2					
	30	Interdisciplinary Studies (Including ISAT)								4	26	10
	31	Recreation and Leisure						16	14	45	42	43
	42	Psychology		22	21	14	21	18	10	19	17	24
	44	Public Administration				8	9	8	12	8	25	20
	45	Social Sciences									16	11
	50	Visual and Performing Arts	1	6	4	13	10	16	11	9	14	18
	51	Health Professions		2	17	31	31	32	38	43	92	83
52	Business, Marketing, Management, and Related Fields		12	51	54	77	65	47	68	79	89	
54	History	3	2	4	10	7	10	8	5	15	11	
	Total	78	161	323	258	252	364	338	542	737	748	
DR	30	Leadership Studies										8
	42	Psychology						9	3	9	15	
	50	Visual and Performing Arts								6	7	
	51	Health Professions							7	3	8	
	Total							9	10	18	38	
Grand Total			764	1,514	1,976	2,372	2,702	2,862	3,581	4,319	4,711	5,362

The graphic below depicts the relative size and distribution of graduate degrees awarded since 1970-71. In 1970-71 education was the largest graduate major in size and proportion (64 / 82.1%). By 2014-15 education was still the largest graduate major in size and proportion (401 / 53.6%), but there is a much broader range of disciplines now, especially in health and business.



In Summary:

If one were to visit Madison College in 1970-71, he/she would find a very different campus from 2014-15 in many dimensions, not to mention the Harrisonburg/Rockingham County community. In 1966 Madison College became coeducational. The number and type of disciplines offered began to change to reflect the diversity of the student body as well as the needs of the workplace.

- JMU grew from 4,041 students in 1970-71 to 20,855 in 2014-15 (+516%).
- 3,807 students applied in 1970-71 to be freshmen compared to 22,550 in 2014-15 (+592%).
- Degrees conferred increased from 764 in 1970-71 to 5,362 in 2014-15 (+702%).
- Bachelor's degrees awarded in the health and business disciplines grew from 57 (8.3%) in 1970-71 to 1,358 (30.2%) in 2014-15 (+2,384%). STEM graduates increased from 59 to 835 (+1,515%). Health graduates increased from 20 to 734 (+3,670%).
- While education was by far the most sought after degree in 1970-71, teacher education is still pursued by many students and remains one of the strong undergraduate and graduate offerings.
- In the last 40+ years, Madison College/James Madison University has evolved to meet the needs of students and the Commonwealth. It is truly remarkable that JMU has grown so quickly and comprehensively while maintaining a very high reputation in the Commonwealth, in other states and in more than 60 foreign

Thoughts about the data provided in this Research Note are welcome and can be sent to [OIR](#).