Faculty Productivity and Carnegie Institutional Characteristics within AEJMC Programs

Linda Morton and Fred K. Beard

This article reports the results of a content analysis of faculty vitae from eighteen ACEJMC programs drawn using stratified random sampling by Carnegie Classification. The findings indicate that faculty members differ by Carnegie Classification on research productivity, highest earned degrees, professional experience, time assignments (for research, teaching, and service), contact and credit hours, and external grants.

The Carnegie Classification of Institutions of Higher Education categorizes colleges and universities by the top degree offered, the number of doctoral or master's degrees granted per year, the emphasis on research, and the monetary value of external grants awarded to faculty. Established in 1971, it has been used in numerous studies to denote differences in colleges and universities. Before the most relevant of those studies are reviewed, it's important that readers understand the classification system.

Previous researchers have identified Carnegie Classification as an important institutional characteristic. For instance, both tenure procedures (Howe, 1980) and gift income and fundraising practices and programs (Woods, 1987) have been found to differ significantly by Carnegie Classification. Keely (1992) also investigated institutions' finances as related to Carnegie Classification. He used spending patterns concerning instruction, research, public service, academic support, institutional support, student services, and operation and maintenance of the plant to validate Carnegie Classification and to explain reclassification of institutions from Research II (RII) and Doctoral II (DII) to RI and DI categories.

Linda Morton (LMORTON@OU.EDU) and Fred K. Beard (FBEARD@OU.EDU) are professors in the Gaylord College of Journalism and Mass Communication, University of Oklahoma.

The Carnegie Foundation noted institutions' attempts toward reclassification in its 2001 report on teaching.

> Campus officials regularly look to the Carnegie Classification to gauge where their college fits into the academic pecking order, and to identify peer institutions for comparison purposes. Indeed, because many people perceive the Classification as a ranking system, some institutional leaders adopt "moving up the Carnegie Classification" as an explicit institutional goal. (p. 6)

Aldersley (1995) noted how an institution's goal to be reclassified according to the Carnegie Classification scheme encouraged institutions to adopt a graduate/research model and to seek the prestige of doctorate-level education. Howard, Hitz, and Baker (1998) compared spending on various programs across four major Carnegie classifications, while Mundfrom et al. (1998) looked at how research and statistics are taught across Carnegie Classifications.

Cuban (1999) found that the classification system has resulted in institutions placing a higher priority on research than on teaching. He noted the need for balancing teaching and research while still "striving for higher institutional prestige."

The Carnegie Classification System in use up to the year 2000 categorized institutions of higher education as Research I, Research II, Doctoral I, Doctoral II, Masters I, and Masters II. The 2000 edition of the classification retains the basic structure of the earlier versions, although it reduced the number of categories used to classify doctorate-granting institutions from four to two by eliminating extent of federal funding and priority given to research as criteria for differentiating RI and RII universities from DI and DII universities. Because these differences were deemed important for the present study, the authors relied on the 1994 classification of universities. These classifications are defined as follows:

Research I and II. These institutions offer a full range of baccalaureate programs, are committed to graduate education through the doctorate degree, and give high priority to research. They award fifty or more doctoral degrees each year. Whereas RI institutions annually receive at least $40 million or more in federal support, RIIs receive between $40 million and $15.5 million.

Doctoral I and II. These institutions offer a full range of baccalaureate programs and are committed to graduate education through the doctorate. Whereas DI institutions award at least forty doctoral degrees annually in five or more disciplines, DIIs award at least ten doctoral degrees—in three or more disciplines—or twenty or more doctoral degrees in one or more disciplines.

Masters I and II. These institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. Whereas MIs award forty or more master's degrees annually in three or more disciplines, MIIs

award only twenty or more master's degrees annually in one or more disciplines. (The Carnegie Foundation for the Advancement of Teaching, 2001)

RI and RII schools are typically the larger state "comprehensive" universities where research is an important part of faculty members' duties. Typically, faculty members working at these institutions teach fewer classes and are expected to regularly publish and/or present traditional research in prestigious journals and national and international conferences. Graduate students at these schools are taught research methods and are generally expected to do a thesis at the master's level. Doctoral students often teach undergraduate classes and/or assist faculty members with their teaching or research activities. Undergraduate students may have many classes taught by graduate students, especially at the freshman and sophomore levels.

The difference between RI and RII schools is primarily one of monetary resources. RI schools have larger endowments and, thus, more graduate assistantships for graduate students and more scholarships for undergraduate students. RI schools also provide more research support for faculty members. In this study's sample, accredited RI schools are represented by Arizona State University, the University of Southern California, the University of Nebraska, the University of Minnesota, and Northwestern University. Sample accredited RII schools are the University of Mississippi, the University of Oklahoma, the University of Oregon, and Brigham Young University.

The major difference in Research schools and Doctoral schools is the emphasis on research. A student can earn a doctorate degree at both, but will study under faculty members who do more research and can thus better train them in research at Research schools. Graduate students and junior faculty members who work at Research schools are more likely to find mentors who can not only assist them in the research process but can introduce them to important national research colleagues and teach them how to successfully place research articles.

Doctoral schools are generally the smaller state "comprehensive" and "regional" universities. Faculty members at Doctoral schools spend more of their time teaching. Their annual evaluations concentrate more on teaching than research, and they are not expected to do as much research as faculty members at Research schools. Doctoral schools offer faculty members and graduate students smaller classes and closer student-teacher relationships, especially at the graduate level. The major difference in DI and DII schools is the number of doctoral degrees they grant each year. Thus, DII schools usually have fewer and smaller doctoral programs than DI schools. In this study, accredited DI schools include The American University and Bowling Green University. Sample accredited DII schools include Middle Tennessee State University and University of Nevada-Reno.

Unlike the other four classifications, MI and MII schools only offer graduate education through the Master's degree. These schools generally put their emphasis on undergraduate rather than graduate education. They frequently have historically been labeled "teaching" or "regional" universities. Graduate students generally

have small classes and little opportunity to either teach or to do research with faculty members. Faculty members at Master's schools have larger teaching loads than those at Research or Doctoral schools. They are expected to participate in research minimally, if at all. Professional and creative activities will generally satisfy their program's research requirements. Sample accredited MI schools include Western Kentucky University, Central Michigan University, and University of Tennessee at Martin. At the time of this study, there were no accredited MII schools.

Does Carnegie Classification have an important influence on faculty activities in J/MC? This study addresses this question by exploring how faculty at ACEJMC-accredited colleges, schools, and departments differ by teaching, research, and grant activities by Carnegie Classification. It also looks for differences in faculty characteristics including highest earned degrees and professional experience. It is based on the premise that faculty members' home institutions influence the extent that they are expected to engage in research, teaching, and service activities.

The study adds to the general stream of research on faculty productivity at different Carnegie classified schools and establishes a benchmark for journalism and mass communication faculty by Carnegie Classification. It is guided by the following research questions:

RQ1: How does faculty research and creative productivity differ by Carnegie Classification of educational institutions?

RQ2: How do faculty members differ in highest earned degrees by Carnegie Classification of educational institutions?

RQ3: How do faculty members differ in professional experience by Carnegie Classification of educational institutions?

RQ4: How do faculty members' time assignments differ by Carnegie Classification of educational institutions?

RQ5: How do faculty members' teaching contact and credit hours differ by Carnegie Classification of educational institutions?

RQ6: How do faculty members differ in grant activity by Carnegie Classification of educational institutions?

Method

The data for this study were collected using a content analysis of faculty curriculum vitae from a sample of ACEJMC-accredited JMC programs. ACEJMC-accredited programs are the population of interest for two reasons: (a) accredited programs are believed to be more likely to possess a mix of practice-oriented and traditional academic faculty (DeLong, 1984), and (b) because archived accreditation self-studies provide ready access to a population of faculty vitae. Self-studies for the ma-

Table 1
PERCENTAGES AND NUMBERS OF PROGRAMS BY CARNEGIE CLASSIFICATION IN ACEJMC POPULATION AND STUDY SAMPLE

Category	Percent in Population	Number in Population	Number in Selected Sample	Number Actually in Sample
R1	36	37	9	6
R2	17	17	4	4
D1	08	08	2	2
D2	07	07	2	1
M1	33	34	9	5

jority of collegiate programs in the United States offering degrees in the mass communication disciplines are maintained at ACEJMC's headquarters on the University of Kansas campus in Lawrence. The accreditation self-studies also provide additional descriptive data on the programs and faculty, which are contained in "Table 2" of the self-studies.

The vitae in this study were included in accreditation self-studies completed between 1995 and 2001 at sample schools regardless of the year they were submitted. Because some self-studies were conducted before 2001, years of productivity counted for each faculty member varied between one and six years. Thus, average annual faculty productivity is based on the number of conducted activities listed on a vita, divided by the number of years included on the vita between 1995 and 2001.

The 1995 through 2001 years were selected in order to capture the most recent data while ensuring that all accredited programs had an equal chance of being included in the sample. Because all accredited programs must undergo reaccreditation every six years, the six-year period of this study represents a population of all accredited programs.

Sample. The sampling frame consisted of a list of all accredited mass communication programs in the United States to which the authors added Carnegie Classifications by looking up each on the Carnegie Foundation Web site (The Carnegie Foundation for the Advancement of Teaching, 2001). Programs in each classification were then numbered chronologically for random sampling.

After determining the Carnegie classification for each ACEJMC program, a stratified random sample was drawn to assure that the sample maintained the same proportion by Carnegie classification as the ACEJMC population. Table 1 provides the total number of ACEJMC programs, the number selected for the sample, and the actual number sampled by Carnegie Classifications. There were no MII programs in the population.

Categories and Coding Form. The original coding form consisted of 86 categories determined from follow-

ing an open-ended analysis of all the vitae of the faculty of a college of JMC, located on the campus of a Research II Midwestern university. By way of three training sessions, these categories were systematically reduced to 68 traditional academic research, professional, and creative activities.

Unlike most studies on research productivity, this study included professional and creative activities as well as traditional scholarly research for two reasons. First, mass communication faculty members must please two masters (Beard, in press). The academic community and their own universities usually demand traditional research published in scholarly journals while professional community leaders expect faculty members to continue performing professional and creative activities like those performed by practitioners. They also expect educators to share their research that relates to practitioners' day-to-day duties through professional publications. In order to determine how well faculty members are serving both masters with their "research" activities, it was necessary to include professional and creative activities.

Second, by definition, RI and RII universities expect more traditional research while universities that concentrate more on teaching (Carnegie Classifications D1 through M2) expect more professional and creative activities. In order to determine if Carnegie definitions adequately describe what schools in the different classifications actually do, it is necessary to include professional and creative, as well as traditional, scholarly research.

Any listed publication, presentation, or activity of any kind that was listed on a vita, but that could not be coded into any category (due to missing or ambiguous citation information), was included in a global measure of productivity. Publications were only counted when they included complete citation information (i.e., article title, publication name, and date of publication). Multiple publications of the same article published in multiple newspapers, for instance, were counted for each publication when complete publication information was provided.

Time assignments were based on Table 2 of the self-studies. For this table, each institution reports in table form percentages of each faculty members' time assigned to research, teaching, and service. These percentages were taken from Table 2 of the self-studies and coded for each faculty member at that institution.

Coder Training and Intercoder Reliability. Training and tests of intercoder reliability were conducted using vitae from the investigators' home program. These vitae were not included in the sample. Before starting training, both investigators coded all the vitae to assure they were coding consistently and to work out problems with the coding form and system. They then conducted three training sessions with graduate student coders. In the first training session, the authors went through one vita with the coders, explaining the coding system and answering questions about how to code certain entries. Then they gave three more vitae to the coders to code individually. One represented what the investigators considered a difficult vita to code, one represented an easy vita to code, and one was considered average in coding difficulty.

To determine intercoder reliability, a formula recommended by Broom and

Table 2
MEAN RESEARCH PRODUCTIVITY BY CARNEGIE CLASSIFICATION

Type of Institution	Traditional Academic Research *	Professional and Creative Activities **	Total Research Activities ***
RI	1.36	1.40	2.78
RII	1.49	2.19	3.68
DI	0.88	1.59	2.47
DII	0.79	1.29	2.08
MI	0.44		1.28
Total		1.45	2.54

* $F(4, 221) = 3.923$, $p = .004$
** $F(4, 216) = 2.3923$, $p = .052$
*** $F(4, 216) = 3.816$, $p = .005$

Dozier (1990) was utilized. That formula is provided below:

$$\text{Reliability} = \frac{4M}{N1 + N2 + N3 + N4}$$

Where M = the number of cases where the four coders agreed in their classification, N1 is the number of cases coded by coder one, N2 is the number of cases coded by coder two, etc.

Before the second training session, the coders turned in their coding forms and the principal investigator calculated intercoder reliability (92%) for all possible responses, including those categories in which no vita items were coded. Then the investigators gave the coders another set of three vitae to code before the third training session.

The intercoder reliability for this set of vitae was also 92% for all possible responses and 83% for just those categories in which the coders had tallied activities. During this session more questions were answered and more categories were collapsed, leaving a total of 68 activities plus 15 items that were coded directly from Table 2 of the self-studies.

Data Analysis. Of the 68 activities coded, no faculty members had produced 18 of them. Means were calculated for the remaining 50 activities, then the activities were collapsed into two categories of research productivity: (a) traditional academic research and (b) professional and creative activities. The researchers placed activities into the two categories from their understanding of and experience with both. Activities as assigned to categories with descriptive statistics are shown in Table 2.

Of the 223 educators in the sample, eight did not indicate what degrees they held on their vitae. Of the remain-

Table 3
HIGHEST DEGREES HELD BY CARNEGIE CLASSIFICATION

Type of Institution	Bachelor's			Master's			ABD			Doctorate		
	N	%		*N*	%		*N*	%		*N*	%	
		•	••		•	••		•	••		•	••
Research I	6	43	7	23	29	28	2	40	3	48	41	59
Research II	2	14	5	11	14	26	0	0	0	30	26	70
Doctorate I	2	14	5	24	30	65	0	0	0	11	9	30
Doctorate II	3	21	33	1	3	11	1	20	11	4	3	44
Masters I	1	7	2	20	25	38	2	40	4	24	21	45
TOTAL	14	7		79	33		5	2		117	54	

• = percentage of degree at this Carnegie Classification.
•• = percentage of this Carnegie Classification with this degree.

ing 215 educators, more than half (52.5%) hold the doctorate degree, five are all but dissertation (ABD), and 79 (35.4%) hold the master's as their highest degree. Another 14 (6.3%) have bachelor's degrees only. Total educators in each analysis vary due to missing information in some institution's self studies.

Mean professional experience was calculated by the programs' Carnegie Classification. Professional experience was collapsed into seven categories in order to identify significant differences: 1 = 1 through 5 years, 2 = 6 through 10 years, 3 = 11 through 15 years, 4 = 16 through 20 years, 5 = 21 through 25 years, 6 = 26 through 30 years, 7 = more than 30 years of professional experience.

Results

RQ1: How does faculty research and creative productivity differ by Carnegie Classification of educational institutions?

Faculty research productivity differs significantly by Carnegie Classification for traditional academic research ($F(4, 221) = 3.923$, $p = .004$) and for total productivity (F (4, 216) = 3.816, $p = .005$), but not for professional and creative activities (F (4, 216) = 2.392, $p = .052$). Tukey post hoc tests show that the significant contrast for traditional academic research is for RI and RII with MI institutions. The significant difference for total research productivity is for RII with MI institutions (see Table 2).

Faculty at RII institutions have the highest mean for traditional scholarly research, professional/creative activities, and overall scholarly productivity. Faculty members at RI institutions have the second highest mean for traditional academic research and over-

Table 4
TIME ASSIGNMENTS BY CARNEGIE CLASSIFICATION

Type of Institution	Percent of Time Assigned to Research*	Percent of Time Assigned to Service**	Percent of Time Assigned to Teaching***
RI	27.26	31.29	34.37
RII	24.00	25.67	20.93
DI	29.09	21.45	47.97
DII	32.00	24.00	24.44
MI	13.19	20.46	54.06
Total	24.73	25.46	38.31

*F (4, 1248) = 3.282, p = .013
**F (4. 138) = 3.282, p = .013
***F (4, 153) 12.986, p = .000

all scholarly productivity. They have the third highest mean for professional/creative activities. Faculty members at MI institutions have the lowest means for all three measures.

RQ2: How do faculty members differ in highest earned degrees by Carnegie Classification of educational institutions?

Because there were no faculty classified as ABD at RII and DI schools, highest degrees earned were collapsed into two categories: those with doctoral training (ABD and doctorates) and tho3e without (Bach elor's and Master's). A chi-square test revealed that frequencies of the two groups were significantly different from what would be expected due to chance (X^2(4) = 15.55, p = .004).

A little more than half (117, 54%) of all educators in the sample hold the doctorate degree. Almost half (48, 41%) of these doctorate degreed educators work in RI institutions, as shown in Table 3. They comprise almost two-thirds (59%) of the mass communication educators at these RI programs. The next greatest proportion of doctorate degreed educators (30, 26%) work in RII institutions, comprising almost three-quarters (70%) of the faculty there. Almost half of educators in programs at DII (44%) and MI (45%) institutions hold the doctorate degree. Only 30% of educators at DI programs have the doctorate (see Table 3).

The next greatest proportion of educators in the sample (79, 33%) have master's degrees. They are relatively evenly divided between RI (23, 29%), DI (24, 30%), and MI (20, 25%) institutions. Educators with bachelor's degrees and those who are ABD comprise

Table 5
TEACHING CONTACT AND CREDIT HOURS BY CARNEGIE CLASSIFICATION

Carnegie Classification	Weekly Contact Hours*	Weekly Credit Hours**	Combined Mean
RI	7.89	7.67	6.57
RII	6.56	5.81	6.19
DI	7.51	8.00	7.76
DII	12.57	8.43	10.50
MI	11.00	10.50	10.75
Total	8.69	8.32	8.30

* F (4, 151) = 5.031, p = .001
** F (4, 154) = 16.894, p = .000

only 9% of the sample. Of those with bachelor's degrees (14, 7%), almost half (6, 43%) work at RI institutions. Only one (7%) works at a MI institution. However, those who are ABD (5, 2%) are equally divided between RI and MI institutions (2 each).

RQ3: How do faculty members differ in professional experience by Carnegie Classification of educational institutions?

Faculty members differ significantly in professional experience by type of institution (F (4, 223) = 6.6158, p = .000). A Tukey post hoc test reveals that the significant difference is for RI and DI with RII and MI institutions. Mass communication educators at D1 programs have the highest mean professional experience (20.14), followed by those at R1 (18.60) and D2 (15.67). Educators at R2 (12.37) and M1 (10.81) programs have the least mean professional experience (see Table 4).

RQ4: How do faculty members' time assignments differ by Carnegie Classification of educational institutions?

Time assignments for research (F (4. 138) = 3.282, p = .013), service (F (4, 1248) = 3.282, p = .01), and teaching (F (4, 153) 12.986, p = .000) differed significantly by Carnegie Classification. Tukey post hoc tests revealed that the significant difference for research was between RII schools and all other Carnegie classifications. The significant difference for service was between RII schools with DII and MI schools.

However, time assigned to research does not appear to be associated with research productivity because faculty members at RII institutions, who

Table 6
EXTERNAL AND INTERNAL GRANT ACTIVITY BY CARNEGIE CLASSIFICATION

Carnegie Classification	Number of External Grants*	Dollars from External Grants**	Number of Internal Grants**	Dollars from Internal Grants
RI	.10	3146.39	.03	691.98
RII	.12	9054.14	.08	544.94
DI	.00	.00	.06	534.38
DII	.00	.00	.00	.00
MI	.04	194.97	.04	183.02

* (F (4, 220) = 4.239, p = .0025)
** (F (4, 221) = 2.492, p= .0441)
*** (F (4, 221) = 2.808, p = .0266)

produce the most research, are next-to-last on time assigned to research. Those at DII institutions who have the next to the lowest mean on all measures of research productivity are assigned the most time for research (see Table 4).

RQ5: How do faculty members' teaching contact and credit hours differ by Carnegie Classification of educational institutions?

Faculty member's contact hours (F (4, 151) = 5.0306, p = .001) and credit hours (F (4, 154) = 6.8936, p = .000) differed significantly by Carnegie Classification. A Tukey post hoc test revealed that the significant differences were between MI with RI, RII and D1 schools. At MI and DII schools faculty are expected to spend more of their time on instruction than at RI, RII and DI schools. MI schools had a mean of 11.0 for contact hours and 10.50 for credit hours, for a combined mean of 10.75. DII schools actually had a higher mean for contact hours (12.57), but a lower mean for credit hours (8.43 and a very similar combined mean (10.50) (see Table 5).

However, time assigned to teaching fails to predict mean contact and credit hours. Faculty members at DII institutions have the highest means for contact hours and the second highest for credit hours and combined teaching measures while they are next to last in time assigned to teaching.

RQ6: How do faculty members differ in grant activity by Carnegie Classification of educational institutions?

Faculty members' grant activity significantly differed for three of four measures: number of external grants (F (4, 220) = 4.239, p = .0025), number of

internal grants (F (4, 221) = 2.808, p = .0266), and dollar amount of external grants (F (4, 221) = 2.492, p = .0441). The dollar amount of internal grants did not differ significantly by Carnegie Classification.

Tukey post hoc tests revealed that the significant difference in number of external grants was between RII with DI and DII schools. RII schools had the highest mean (m = .12) while DI and DII schools had no external grants (m = .00). However, means differed little between RII and RI (m = .10) schools. Interestingly, the MI school mean (m = .04) was about half of the RIs. Tukey tests indicated that the significant difference in dollars of external grants was between RII (m = $9,054,135) and MI ($m$ = 1934.96) schools, but DI and DII schools still had means of .00.

The significant difference in number of internal grants was between RII and RI schools, with RII schools having the highest mean (.08) and RI schools having the lowest (.03). DII schools again had a mean of .00 (see Table 6).

Discussion

The finding that faculty at RII universities have the highest level of scholarly productivity, compared to even RI universities, is somewhat unexpected. One explanation for this finding is that, as the literature suggests, many administrators do view the Carnegie Classification System as a ranking system. They, thus, attempt to increase their standing by encouraging their faculty members to accomplish more in the area of traditional scholarly research and sponsored research activities. Faculty members in RII J/MC programs apparently respond to university pressure to produce more traditional academic research and pursue sponsored research in the form of grants. The finding that RII universities have the largest proportion of doctorate-degreed faculty, the lowest mean professional experience, and the least amount of time assigned to teaching also provides additional support for this conclusion. On the other hand, the fact that RII faculty have far less time assigned to research seems to be an institutional characteristic out-of-sync with these other findings.

The results regarding how faculty productivity and performance characteristics differ by Carnegie Classification also provide insight into the extent to which J/MC programs attempt to balance the expectations of their university peers and media industry constituencies. The compositions of faculty, their degrees, professional experience, and time devoted to the traditional triad of scholarly work—all indicate that J/MC programs vary the compositions of their faculty and expectations regarding faculty productivity in accordance with institutional expectations. Clearly, the presence on the faculties of all Carnegie Classifications of non-doctorate, practice-oriented educators indicates the effort to meet the expectations of media industry critics and peers, as well as, presumably, to enhance the teaching of J/MC skills.

It is also interesting to note that RII mass communication faculty members also exceed other classifications in professional/creative activities, despite the fact that it is likely these activities earn them little respect among their university peers.

Recommendations for Future Research

Although the data for this study provide objective measures of institutional characteristics and faculty performance, they are limited in that they do not provide insight to how J/MC administrators and faculty are impacted on a personal level. For example, Beard's (in press) survey of administrators of ACEJMC-accredited programs found that the majority of them at three institutional levels—doctoral, master's, and baccalaureate—are somewhat dissatisfied with the amount of funded research efforts made by their faculty.

Such research would be especially useful since the findings of this study show that RII faculty have the highest productivity in traditional research, professional/creative activities, and externally and internally sponsored research, and almost the lowest amount of time assigned to research. Thus, it would be helpful to understand more about how RII faculty members are impacted by research and related productivity expectations personally. It would also be useful to explore whether reward systems are in line with these productivity findings. For example, do RII faculty have higher levels of institutional support, such as graduate assistants and merit pay? This is especially important, since recent research indicates that the availability of graduate assistants is an important determinant of whether faculty will pursue external grants to support their research activities (Beard, in press).

It is also important to note that RI J/MC programs have more faculty with professional media experience and fewer with doctorates, compared to RIIs. This raises a number of institutional questions: Are J/MC programs on RI campuses more professionally oriented and less scholarly compared to those on RII campuses? Why would that be and what does that imply about J/MC education in the United States? Do RI and RII J/MC programs differ in other significant ways and are those institutional characteristics associated with scholarly productivity? For instance, are RI programs more or less likely to include Advertising and/or PR programs within their colleges or departments? Since RII J/MC programs appear to be more productive, do their hard sciences colleagues hold them in greater esteem? Given the findings of this study, one would expect that J/MC programs on RII campuses would be seen as more scholarly on their own campuses when compared to RIs.

Finally, since this study only examined quantity of various scholarly activities, future research could usefully examine faculty performance qualitatively. For instance, although RII institutions were found to have higher levels of productivity compared to RIs, it may be that the quality of the research and grant activity of RIs is higher (e.g., they publish in more prestigious journals). It would be insightful, then, to explore this and other qualitative differences between the activities of RI and RII faculty.

References

Carnegie Foundation for the Advancement of Teaching (2001). *A Classification of Institutions of Higher Education: A Technical Report.* Princeton, NJ. Retrieved 2 August

2001, from <*http://www.carnegiefoundation.org/Classification/*>.

Aldersley, S. F. (1995). "'Upward Drift' Is Alive and Well: Research/Doctoral Model Still Attractive to Institutions," *Change* 27 (5): 50-56.

Beard, F. K. (in press). "Sponsored Research Activities in Journalism and Mass Communication Programs." *Journalism & Mass Communication Educator.*

Broom, G. M., and Dozier, D. M. (1990). *Using Research in Public Relations: Applications to Program Management.* Englewood Cliffs, NJ: Prentice Hall.

Cuban, L. (1999). *How Scholars Trumped Teachers: Change without Reform in University Curriculum, Teaching, and Research, 1890-1990.* Williston, VT.

DeLong, R. (1984). "Journalists Not Happy with Switch to Teaching Career." *Journalism & Mass Communication Educator* 39 (1): 15-17.

Howard, R. D., Hitz, R., and Baker, L. (1998). "A National Study Comparing the Expenditures of Teacher Education Programs by Carnegie Classification and with Other Disciplines." *Action in Teacher Education* 20 (3): 1-14.

Howe, R. (1980). "Tenure Policies and Practices: A Summary." *Journal of the College and University Personnel Association* 31 (3): 18-31.

Keeley, E. J. (1992). *An Analysis of Expenditure Allocation and Its Relationship to Institutional Classification.* Paper presented at the annual forum of the Association for Institutional Research, Atlanta, GA.

Mundfrom, D. J. et al. (1998). *Introductory Graduate Research Courses: An Examination of the Knowledge Base.* Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Woods, J. L. (1987). *Factors Associated with Gift Income in Public Research and Doctoral Granting Institutions.* Washington.