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Which Institutions Produce Graduates Who Publish in Leading Reading Research Journals?

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ABSTRACT

Previous productivity studies have ranked institutions according to the productivity of their reading faculty. The present study extended this work by investigating which institutions produce graduates who publish reading research. The authors of research articles in two leading reading research journals were identified for a recent six-year period. The institution from which each author received his or her doctorate was determined. Institutions were then ranked based on the number of authorships attributed to each institution. Institutions were also ranked based on the number of sole or lead authorships, the number of different authors, and a composite score that combined the number of authorships and the number of different authors. The results are compared to previous rankings of institutions based on the productivity of reading faculty. Implications of findings for comparing graduate programs in reading are discussed.

Many factors must be considered to determine the quality of a graduate program in reading. One factor of considerable importance is whether graduates of a program are successful in the careers for which they were prepared. Little is known about how graduate programs in reading at institutions in the United States compare in their ability to prepare individuals for careers in the field of reading. Lack of information about the success of a program's graduates is understandable, given the many difficulties in acquiring such data. For example, finding suitable criteria to evaluate success in a career is problematic. For one career choice in reading, however, a major criterion for success is well defined. Today, an individual who wishes to become a professor of reading at a major university will be expected to engage in scholarly activities leading to publication. Announcements of faculty positions such as those advertised in the *Chronicle of Higher Education* frequently specify this requirement when describing the ideal candidate.

Success as a faculty member at a major university is often linked to the number of journal articles published and the quality of the journals in which they appear. Although many types of scholarly publications are recognized as important, research articles in journals that publish primarily empirical studies are generally afforded more status than other publications. The present study, therefore, compared institutions on this basis: to what extent did graduates of different institutions publish articles in two leading reading research journals?

Our primary purpose for investigating this question was to compare empirically the degree to which graduates of various institutions have been successful in publishing reading research. The results of this comparison could be considered an indicator of success for institutions seeking to prepare individuals who are capable of publishing reading research. This information may help students select an institution for graduate study or help prospective employers locate candidates who are likely to produce and publish research in reading. In addition, individual institutions and programs could use this information as a reference point for comparing their graduates to graduates of similar institutions. Our purpose was not, however, to compare the overall quality of graduate programs in reading, since we have examined only one aspect of professional training related to one career choice.

Prospective doctoral students who seek training that will enable them to conduct and publish reading research (or those who wish to keep that option open) would be well advised to consider numerous factors when deciding which graduate school to attend. One factor related to this study that might be considered is the scholarly productivity of the reading faculty at a particular institution. Presumably, it would be advantageous to attend an institution where the reading faculty has demonstrated success in publishing their work in leading reading research journals. It is likely that opportunities for gaining first-hand experience in conducting educational research prior to obtaining a doctorate are greater at institutions having reading faculty who are actively engaged in research.

Two previous studies (Hopkins, 1979; Jones, Ary, & St. John, 1986) have investigated this characteristic of graduate programs in reading. In each of these studies institutions were ranked on the basis of the number of journal articles published by reading faculty in selected reading journals. Dillon (1986), however, has questioned the validity of the methods used in these investigations and the usefulness of these data for choosing a graduate program in reading. She has argued that it may be misleading to infer the quality of a graduate program on the basis of these studies, since they failed to examine several factors affecting the number of articles published, which may bias the institutional rankings. Instead, she concluded, "Perhaps the best indicator of an institution's overall productivity and program success is reflected in the products of that program, the students who graduate. Do these graduates continue their work and become productive, contributing reading professionals?" (p. 56)

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From the perspective of students attempting to decide which institution will best prepare them to conduct and publish reading research, therefore, the publication performance of graduates of various institutions may be more relevant information than the number of articles published by current reading faculty at these institutions. One test of this hypothesis is to compare productivity of faculty and graduates of the same institutions. Are the institutions with the most productive faculties also those institutions that have the most productive graduates? Another purpose of the present investigation, therefore, was to compare institutional productivity rankings as determined in a recent study of faculty productivity (Johns, Ary, & St. John, 1986) and institutional rankings based on the number of reading research articles published by graduates of different institutions.

METHOD

In this study we identified the institution granting a doctorate to authors who published articles in two leading reading research journals. The two journals examined were the *Reading Research Quarterly* (RRQ) and the *Journal of Reading Behavior* (JRB). These research journals were selected because they have high status in the field of reading. Several factors support this characterization; for example, (a) articles published in these journals deal solely with reading; (b) they are predominantly reports of empirical research or reviews of reading research; (c) the journals are published by two leading professional organizations in reading (the International Reading Association and the National Reading Conference respectively); (d) they were included in previous research investigating faculty productivity (Hopkins, 1979; Johns, Ary, & St. John, 1986); and (e) they have relatively low acceptance rates and relatively high circulations when compared to other research journals (see Dillon, 1986). In short, publishing an article in one of these journals is indicative of success in publishing reading research.

Journal issues from 1980 through 1985 were studied. These included volumes 15-20 of *RRQ* and volumes 12-17 of *JRB*. Only research articles or reviews of research were counted in this study. Commentaries, book reviews, and letters to the editors were not included. From the journal issues studied, 306 articles (*RRQ* = 158; *JRB* = 148) and 579 authors (*RRQ* = 292; *JRB* = 287) were identified.

Several methods were used to determine the institution granting each author's degree: (a) reference to biographical sketches in *RRQ*, (b) reference to biographical sketches in other journals (e.g., *Reading Psychology*) (c) reference to *Dissertation Abstracts International*, (d) reference to college catalogs that listed where faculty obtained their degrees, and (e) personal communication with the author or a known associate (e.g., a co-author). If authors were graduate students at the time the article was published, the institution in which they were enrolled was identified. All but 32 authors were matched with a graduate program

at a degree-granting institution. In most cases the 32 remaining authors had not received a doctorate, were not currently students in a graduate program (e.g., they were classroom teachers), or were affiliated with foreign universities.

In order to compare graduates from different institutions each article was assigned a value of 1.0. If an article had a single author, a value of 1.0 was tallied for the institution from which the author had received a doctorate (or in the case of a graduate student the institution in which he or she was a graduate student). For articles having multiple authors, this value was divided equally among the authors and credited to their respective institutions. These values were summed for each institution to obtain a research publication score. Also noted was the total number of authors from each institution and the number of sole or lead authorships by institutions.

RESULTS AND DISCUSSION

Authors' degrees or degree programs represented 104 different institutions. Table 1 shows the rank of the twenty institutions receiving the highest research publication scores. Since being the sole or lead author of a research article is normally considered more prestigious, we also ranked institutions along this dimension. Table 2 shows the results of this analysis for 25 institutions. In addition, institutions were ranked by the number of different authors who were associated with each institution. This ranking for 23 institutions is shown in Table 3.

Table 1 Research Publication Scores

Rank	Institution	Score
1	University of Illinois	24.26
2	University of Wisconsin	22.16
3	University of Minnesota	20.83
4	Stanford University	12.25
5	University of Iowa	11.00
6	University of California-Berkeley	10.74
7	University of Michigan	9.75
8	University of Georgia	8.00
9	University of Oregon	7.85
10	University of Texas	6.63
11	University of Washington	6.50
12	Harvard University	5.53
13	Arizona State University	5.50
14	UCLA	5.15
15	University of Utah	5.11
16	SUNY-Albany	5.00
17	University of Maryland	4.71
18	University of Pittsburgh	4.24
19	Purdue University	4.00
20	Cornell University	3.83

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	6.63
	6.50
	5.53
	5.50
	5.15
	5.11
	5.00
	4.71
	4.24
	4.00
	3.83

Table 2 Number of Sole or Lead Authorships

Rank	Institution	Number
1	University of Wisconsin	24
2	University of Illinois	23
3	University of Minnesota	19
4	University of California-Berkeley	13
5	Stanford University	13
6	University of Iowa	10
7	University of Michigan	8
8	University of Washington	7
9	University of Arizona	6
	University of Oregon	6
	UCLA	6
12	Arizona State University	5
	Cornell University	5
	Harvard University	5
	University of Maryland	5
	University of Texas	5
17	University of Chicago	4
	University of Georgia	4
	University of Nebraska	4
	Pennsylvania State University	4
	University of Pittsburgh	4
	Southern California University	4
	Syracuse University	4
	Utah University	4
	Virginia Polytechnic Institute	4

Table 3 Number of Different Authors

Rank	Instruction	Number
1	University of Minnesota	35
2	University of Illinois	26
3	University of Georgia	15
4	University of Oregon	14
	University of Wisconsin	14
6	Stanford University	13
7	University of Texas	12
8	Arizona State University	10
9	University of California-Berkeley	9
	University of Michigan	9
11	University of Iowa	8
	SUNY-Albany	8
	UCLA	8
14	University of Maryland	7
	Pennsylvania State University	7
16	University of Arizona	6
17	Cornell University	5
	University of Delaware	5
	Harvard University	5
	Indiana University	5
	Michigan State University	5
	Purdue University	5
	Syracuse University	5

Finally, an analysis was conducted to correct for the fact that an institution's research publication score could be high because one graduate of that institution published many articles in the two journals examined. More desirable, given the purpose of this study, would be an institution that had a high research publication score, but achieved that score because several of its graduates published articles. Thus, as is shown in Table 4, we ranked institutions on the basis of a score computed by multiplying the research publication score and the number of different authors from each institution. A higher value on this scale indicates the combined effects of the number of articles published and the number of different authors who wrote them. It should be noted, however, that these values represent an ordinal not an interval scale. Comparisons using the relative difference between two values are inappropriate.

Table 4 Products of the Research Publication Score and the Number of Different Authors

Rank	Institution	Product
1	University of Minnesota	708.22
2	University of Illinois	630.76
3	University of Wisconsin	310.24
4	Stanford University	159.25
5	University of Georgia	120.00
6	University of Oregon	109.90
7	University of California-Berkeley	96.66
8	University of Iowa	88.00
9	University of Michigan	87.75
10	University of Texas	79.56
11	Arizona State University	55.00
12	UCLA	41.20
13	SUNY-Albany	40.00
14	University of Maryland	32.97
15	Harvard University	27.65
16	Pennsylvania State University	25.27
17	University of Pittsburgh	21.20
18	University of Arizona	20.16
19	Purdue University	20.00
20	Cornell University	19.15

These results suggest several generalizations. First, a relatively large number of institutions (104) are producing graduates who publish in two leading reading research journals. On the other hand, a relatively small number of institutions account for the graduate training of many of the authors. The first 10 institutions in Table 3 account for 27% of all the authors. Furthermore, authors from the first 10 institutions in Table 1 account for 44% of all the articles written in these two journals. Seven universities ranked 10th or above in all four tables (listed alphabetically these are Stanford University, the University of California-Berkeley, the University of Illinois, the University of Michigan, the University of Min-

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nesota, the University of Oregon, and the University of Wisconsin). Three other universities ranked 10th or above in three of four analyses (Listed alphabetically these are the University of Georgia, the University of Iowa, and the University of Texas). Geographically, large midwestern universities predominate among those institutions ranked 10th or above.

There is some correspondence between institutions identified by the Johns et al. (1986) study as having productive faculties and institutions whose graduates publish in two leading research journals. Five of the institutions ranked in the top 10 of the Johns et al. study of faculties contributing to *RRQ* and *JRB* appear at or above the rank of 10 on at least one of the analyses conducted for the present study. (Listed alphabetically these are the University of Georgia, the University of Illinois, the University of Oregon, the University of Minnesota, and the University of Texas.)

Nonetheless, the most productive institutions identified by Johns et al. are not necessarily also those graduating students who publish in the reading research journals used in this study. Five universities identified in the Johns et al. study are being among the 10 universities publishing most consistently in *RRQ* and *JRB* were not ranked among the top 10 institutions on any of the analyses in the present study.

Conversely, nine universities that were ranked in the top 10 in at least one of the analyses is the present study do not appear in the ranking of research productivity in Johns et al. (1986). Thus, institutions that produce graduates who publish research in *JRB* and *RRQ* do not necessarily have faculties that are the most frequent contributors to those journals.

The fact that several large institutions rank highly in both studies is probably due in part to the greater emphasis on empirical research and the greater resources for research that are available at large universities. For example, large universities may attract more external funding for research. A certain amount of the overlap is due also to the fact that faculty members often publish with their students or former students. Also, it is reasonable to assume that the largest institutions and most productive faculties attract the most students. The differences between faculty and graduate productivity are more difficult to explain but probably are due to local factors unique to a particular institution or program. Those knowledgeable about the nature of individual institutions or programs may wish to speculate about explanations for these differences.

Several factors need to be considered when interpreting these data. For example, many of the authors publishing articles in *RRQ* and *JRB* did not receive their degrees in a reading program. The study of reading today is interdisciplinary; including authors who may have received their doctorates in other fields seems justifiable. Faculty in reading programs often encourage their students to take courses and sometimes work collaboratively with knowledgeable faculty outside of reading. Similarly, reading faculty frequently advise students from other disciplines. Further investigations might examine an author's major field of study in addition to the institution granting his or her degree. An indication of the

importance of this issue is the fact that only 11 of the 41 authors whose biographical sketches appear in the *Handbook of Reading Research* (Pearson, 1984) have degrees from or serve in programs traditionally associated with reading education (e.g., curriculum and instruction or elementary education). Twenty-eight of the remaining authors either serve in or have degrees from programs in psychology or educational psychology.

It should also be noted that *RRQ* and *JRB* are not the only outlets for reading research. Several other highly respected publications for reading research exist (see Dillon, 1986, for examples of such publications). It is quite possible that certain reading researchers or reading researchers who graduated from institutions not ranked highly in the present study chose to publish the results of their research efforts in publications other than *RRQ* or *JRB*.

A final caution when interpreting our findings concerns the notion of overall programmatic excellence. Excellence in research is only one factor to be considered when making judgments on the overall quality of a program in reading. Other factors such as excellence in teaching and teacher training, service to the community and profession, and balance between research, teaching and service also need to be considered.

Not investigated in this study was which authors completed their research while graduate students. This information is difficult to determine from published information, but could shed light on the ability of individual programs to prepare graduates who are likely to obtain faculty positions at major universities. Having published as a graduate student, especially in a leading research journal, greatly enhances one's prospects when seeking a faculty position after graduation.

Determining the number of years since the doctorate was obtained would also be a useful follow-up to this study. The pressures to publish are usually greater for untenured faculty, yet tenured faculty may have more success in publishing their work because they have greater experience. It is difficult, therefore, to determine how much of an individual's success in publishing reading research is due to the training she or he received in a doctoral program and how much is due to "on-the-job" experience. Also, it is more difficult to draw conclusions about the current capability of institutions to produce graduates who publish when an unknown number of authors in our sample may have received their degrees several years ago.

Certainly, quality of faculty associated with a reading program and quality of students produced by such a program are two salient factors in judging overall program quality. However, variables other than research productivity must be considered when determining faculty and student quality and other factors besides faculty and student quality need to be considered when determining program quality. Methods for exploring these more enigmatic but important variables related to program quality are needed.

Nevertheless, data from the present study may be used as one point of

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reference for comparing institutions that prepare graduates to conduct reading research. For example, although we agree with Dillon (1986) that prospective graduate students need to consider a variety of factors when selecting an institution for graduate study, data from the present study may assist them in making a decision. In addition, search committees seeking applications for a faculty position that requires the faculty member to conduct reading research could send letters announcing the position to those institutions producing more graduates who have published in learning research journals. Faculties in reading that prepare graduates to conduct reading research may also use these data to evaluate their respective programs. Comparing their institution's position on the various analyses in this study with the Johns et al. (1986) analyses may lead faculty members to consider how the productivity of faculty and students might be related in their graduate program. Finally, we hope the present study will expand the number of factors taken into account by anyone interested in comparing graduate programs in reading.

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