

ENCOURAGING MULTIPLE FORMS OF SCHOLARSHIP IN FACULTY REWARD SYSTEMS: Does It Make a Difference?

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This article presents findings from a national study of Chief Academic Officers of 4-year institutions on the impact of policy efforts to encourage multiple forms of scholarship in faculty roles and rewards. The extent of reform, kinds of reform and influence of initiating reform is examined in four areas: expectations for faculty evaluation, the faculty evaluation process, promotion and tenure outcomes, and institutional effectiveness. The findings are also examined by institutional type. Findings from this study show that campuses that initiated policy reforms to encourage multiple forms of scholarship were significantly more likely than their counterparts to report that teaching scholarship and engagement counted more for faculty evaluation, to report a broader set of criteria used to assess scholarship, and report a higher percentage of tenure and promotion cases that emphasized their work in these areas. In addition, CAOs at campuses that initiated reforms reported a greater congruence between faculty priorities and institutional mission, and greater improvement in attention to undergraduate learning over the last decade.

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KEY WORDS: broader definition of scholarship; reform in faculty evaluation.

INTRODUCTION

In 1990, Ernest Boyer challenged higher education to expand the definition of scholarship used to evaluate and reward faculty work. Boyer's (1990) Carnegie Report, *Scholarship Reconsidered: Priorities of the Professorate* encouraged hundreds of institutions to amend their reward systems to better acknowledge, support, and reward faculty involvement in four domains of scholarship: discovery, teaching,

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integration, and application. The term “engagement” has since been used to describe application. Since the report was published, a movement of faculty, department chairs, chief academic officers, presidents, associations and foundations have worked together to change policies and procedures within reward systems to encourage, assess, and reward multiple forms of scholarship in all institutional types across the country and abroad.

At least on the surface it looks as if this movement has made a significant impact. Just 4 years after its publication, 62% of chief academic officers in 4-year institutions reported that *Scholarship Reconsidered* had had a role in discussions of faculty roles and rewards (Glassick, Huber, and Maeroff, 1997). Adrianna Kezar (2000) conducted focus groups with practitioners and researchers and asked them to identify the most memorable piece of writing that they had read in the last 5, 10 or more years. Almost every focus group member mentioned Boyer's *Scholarship Reconsidered* and said the work “fueled and provided a language for a change that had been discussed for years (Kezar, 2000, p. 450).” Finally the Institute for Scientific Information's citation database reveals that *Scholarship Reconsidered* is one of the most frequently cited publications in the last decade (Braxton, Luckey, and Holland, 2002).

However when one digs deeper, it is less clear what influence Boyer's framework has really had on four-year institutions. Boyer (1990), advocates of assessing teaching as a form of scholarship (Huber, 2002; Hutchings and Shulman, 1999), and advocates of assessing engagement as a form of scholarship (Driscoll and Lynton, 1999; Lynton, 1995) and many other academic leaders have argued that if institutions amend their reward system to encourage multiple forms of scholarly work a host of benefits will follow. Some of these benefits include: increased faculty involvement in multiple forms of scholarship, improved faculty satisfaction and retention, improved reward systems, and increased institutional effectiveness. While a subsequent paper explores the first two areas (O'Meara, 2005a), this article explores the influence of encouraging multiple forms of scholarship on reward systems and institutional effectiveness.

The critical question from the perspective of organizational theorists is: to what degree have campuses really changed? Has changing policies and procedures to encourage multiple forms of scholarship resulted in the kinds of benefits these advocates suggest? Furthermore, how has the impact of reform differed by institutional type?

While there have been many conference presentations, individual case studies and anecdotal accounts of the impacts of formal and informal strategies to encourage multiple forms of scholarship, very little

empirical research has been conducted to see if, in fact, any of the claims made by Boyer and other advocates have indeed occurred.

There are a few notable exceptions. There is a small but growing group of scholars and academic leaders trying to understand the extent of reform in faculty roles and rewards prompted by *Scholarship Reconsidered* (Berberet, 1999; Braskamp, 2003; Braxton, Luckey, and Holland, 2002; Diamond and Adam, 1997; Huber, 1998, 2002). For example, Braxton, Luckey, and Holland (2002) completed a national study of faculty professional performance to understand the degree to which faculty in four disciplines had institutionalized the four domains of scholarship in their everyday work. They found that all four domains of scholarship had attained the most basic or structural level institutionalization, the scholarships of discovery and teaching had attained procedural level institutionalization (wherein the activity is a regular part of workload), but only the scholarship of discovery achieved incorporation level institutionalization (wherein faculty values and assumptions support the activity). The Carnegie Foundation's 1997 national survey of college and university faculty explored the emphasis put on different forms of scholarship over the previous 5 years and found that nearly half of faculty at research universities said greater emphasis was being placed on teaching than 5 years before (Huber, 2002). O'Meara (2001) conducted case study research to understand the impact of redefining scholarship in four different institutional types. She found that each of the four campuses that reformed their promotion and tenure policies experienced a slightly more balanced reward system, an increase in faculty involvement in alternative forms of scholarship, and greater faculty satisfaction with their institutional work-life.

Given the hundreds of campuses that have attempted to integrate a broader definition of scholarship into their reward systems, additional research is needed to explore the extent of reform, the kinds of reforms that have been made, and whether these reforms have resulted in the benefits their advocates suggest.

CONCEPTUAL FRAMEWORK

Literature on academic reward systems and organizational change was mined to understand the extent and kinds of reform that may have been initiated over the last decade to encourage multiple forms of scholarship, and the potential impact policy reform may have had on reward systems and institutional effectiveness.

For over a decade advocates of encouraging multiple forms of scholarship have argued that formal policy changes needed to be made to

university policies, structures and academic reward systems (Diamond, 1999; Driscoll and Lynton, 1999; Glassick, Huber, and Maeroff 1997; O'Meara, 1997; Rice, Sorcinelli, and Austin, 2000). The most popular policy reforms suggested in a review of the literature were: (a) revising or amending institutional mission and planning documents, (b) amending promotion and tenure or contract language and criteria, (c) providing opportunities for flexible workload programs, or (d) providing incentive grants to support multiple forms of scholarship. Glassick, Huber, and Maeroff (1997) conducted a survey of Chief Academic officers in 1994 to understand the extent of different kinds of reforms in faculty roles and rewards. In this study, 78% of CAOS reported that the, "definition of scholarship was being broadened to include the full range of activities in which faculty are engaged" (p. 86), 68% of CAOs reported incentive grants were being awarded (p. 105), 39% of CAOs said changes in the criteria by which tenure is awarded had been made (p. 107), and 29% of all CAOs said allowing faculty to shift their scholarly focus (i.e. flexible workload programs) had been initiated (p. 110). These findings were collected in 1994, just 4 years after *Scholarship Reconsidered* was published. More than a decade after the publication, it is likely that more CAOs would report having made formal changes to encourage multiple forms of scholarship. However, there was no empirical research between 1994 and 2001 to ascertain the extent of reform and the kinds of reform initiated by 4-year institutions.

Researchers have found that expectations for promotion and tenure have been considered "moving targets," by faculty within the last decade (Boice, 1992; Rice, Sorcinelli, and Austin, 2000). In the experience of most faculty, these standards, especially for research productivity, are moving upward (Aldersley, 1995; Dey, Milem, and Berger, 1997). While expectations for promotion and tenure are known to be heavily influenced by discipline and by academic cultures within departments and colleges (Braxton and Hargens, 1996; Tierney and Bensimon, 1996), they are also known to be influenced by academic leadership and by messages sent at the institutional level about what should be valued and rewarded. Institutions send strong messages to their faculty about what they value and who they value through faculty evaluation policies and distribution of resources like release time and incentive grants (Tierney and Bensimon, 1996; Tierney and Rhoads, 1993). The movement to encourage multiple forms of scholarship was intended by many of its leaders to thwart rising research expectations by making other forms of scholarship "count" as much as research for promotion and tenure.

Perhaps because expectations have often been considered moving targets, the faculty evaluation process has been considered widely

flawed as well (Rice and Sorcinelli, 2002; Rice, Sorcinelli, and Austin, 2000). Specifically, the criteria used to assess scholarship has been considered too narrow, making it unlikely that anything other than peer-reviewed journal articles or books would be considered positively in faculty evaluation decisions (Creamer, 1998; Glassick, Huber, and Maeroff, 1997; Park, 1996). Studies of tenure-track and mid-career faculty have shown that many faculty have not felt they could emphasize their work in teaching or service scholarship within the existing promotion and tenure system (Baldwin, 1990). Advocates of teaching scholarship and service scholarship have worked with hundreds of campuses to expand the criteria used to assess scholarship to be more favorable toward alternative forms of scholarship (Diamond, 1999; Driscoll and Lynton, 1999; Huber, 2002; Hutchings and Shulman, 1999; Rice, 1996). It has been the intent of these advocates and CAOs who initiated reform that policy changes in promotion and tenure language and criteria would translate into actual changes in the criteria faculty committees use to assess scholarship and make promotion and tenure decisions. They have intended to broaden criteria from a pure disciplinary focus to one inclusive of the impact of scholarship on students, institutions, and communities.

In terms of promotion and tenure outcomes, the before-mentioned reforms to reward systems are considered one strategy to increase the likelihood that scholars who emphasize teaching or engagement would feel comfortable emphasizing this work in their portfolio, apply, and be promoted.

Finally, Boyer (1990) and others (Diamond, 1993, 1999; Glassick, Huber, and Maeroff, 1997; Lynton, 1995) proposed that initiating policy reform to encourage multiple forms of scholarship would result in increased institutional effectiveness. Diamond (1999) argued that policy reforms to encourage multiple forms of scholarship would improve congruence between faculty priorities and institutional mission and thus the institution's ability to meet institutional goals and objectives. These academic leaders pointed in particular to the areas of undergraduate education and relationships with the community, areas which are often neglected by traditional reward systems. They thought these areas would improve if multiple forms of scholarship were encouraged and rewarded.

While demographic characteristics (such as race, gender, and age), and discipline have been found to significantly influence reward systems, a third factor, institutional type may have the most profound influence on expectations for faculty work and their subsequent influence on evaluation criteria and outcomes.

Clark's (1987) research on institutional diversity and academic life as well as research that has been done about faculty reward systems at different types of institutions provides a strong conceptual foundation for exploring the impact of reform by institutional type. The work of Tierney and Bensimon (1996) and Tierney and Rhoads (1993), for example, describes the life and reward structure that exists for pre-tenure academics in research universities, while Finnegan and Gamson (1996) have explored faculty life at comprehensive and doctoral institutions. Ruscio (1987) and Prince (2000) have explored faculty life at liberal arts colleges, some of which fall into the Carnegie classification of Baccalaureate institutions and others with more of a professional focus fall into the category of Masters institutions. While Chief Academic Officers and their perceptions of change are the primary unit of analysis in the research presented here, the reality of reforming faculty roles and rewards at an institution cannot be divorced from the history and context of faculty work in that institution. As such, it is important to examine the impact of reform in institutions with at least some similarity in mission, faculty workload, and organizational structure. This research on faculty roles and rewards at different types of institutions will ground analysis of how reform has impacted different institutional types.

The Carnegie Classification system (2000) for colleges and universities is a well-established tool for distinguishing between institutional types. For the purposes of this research, a decision was made to collapse several categories into three major institutional type categories—Research and Doctoral institutions, Masters institutions, and Baccalaureate institutions. These categories represent three different types of potential responses to the Boyer reform for comparison, as the missions of these institutional types are distinct. In particular, recent research on Doctoral and Research universities suggest that institutions within this category have become more alike than different in their response to the call for a broader definition of scholarship, with the expectation that faculty excel in multiple forms of scholarship simultaneously (Huber, 2002; O'Meara, 2001). Ward and Wolf-Wendel (2004) in studying academic life and motherhood by institutional type created similar categories for 4-year institutions. Clearly there are significant differences between how public and private, selective and nonselective, religiously affiliated, historically black colleges and universities, 2-year institutions and others reward scholarship. In addition, prestige makes a significant difference in institutional context. The fact that the data in this study are not further broken down by these categories is not to say these distinctions are

not important, just beyond these space considerations. These distinctions are important to study in subsequent research.

Whether an institution has 400 students or 20,000, the responsibilities of the Chief Academic Officer (CAO) or Provost have been found to be consistent in their purvey over recruitment of faculty, ensuring the integrity and fairness of the faculty evaluation process, and promoting growth and morale among members of the faculty (Diamond, 1993; Martin, Samels, and associates 1997). Because of their pivotal role in setting standards for and assessing faculty work, and because of their ability to describe what has happened and is happening in faculty roles and rewards across their campuses, CAOs were the ideal participants for this study.

There are of course a few drawbacks to using CAOs as informants. The larger the institution, the more difficult it is for CAOs to generalize when reporting on changes in academic culture. In addition, CAOs involved in reform efforts to encourage multiple forms of scholarship may have a professional stake in reporting positive outcomes. Attempts were made to address these limitations in the overall project (of which this article is one part) by asking survey questions more than once in different ways and by doing additional qualitative focus groups to validate survey findings (O'Meara, 2005b).

Thus, the guiding research questions for this study were: To what extent have 4-year institutions initiated policy reforms to acknowledge and assess a broader definition of scholarship? Did making formal policy changes to encourage multiple forms of scholarship influence (a) expectations for faculty evaluation (i.e. what counts) (b) the faculty evaluation process (i.e. criteria used to assess scholarship) (c) promotion and tenure outcomes (i.e. chances to be promoted) and/or, (d) institutional effectiveness (i.e. ability to meet goals and objectives) in 4-year non-profit institutions over the last decade? Finally, how did the extent of reform and influence of reform differ by institutional type?

METHODOLOGY

Survey research was the preferred method of data collection because very little research has explored this area and it provided a vehicle to do initial exploratory research, and to generalize from a sample to the larger population of 4-year institution CAOs. Fowler's (1993) work on survey methods guided this research. The survey instrument was designed by the author and reviewed by 6 experts for content and 3 experts in survey design to establish validity and reliability. In addition, the survey was piloted with 6 CAOs and each question talked

through for understanding. From both these pilots, the survey was revised and confirmed.

The survey questions explored the extent of reform, kinds of reform, and CAO perceptions of the impact of reform on expectations for faculty evaluation, the faculty evaluation process, promotion and tenure outcomes and, institutional effectiveness in 4-year non-profit institutions over the last decade. The literature review assisted the researcher in identifying survey items for each of the main four impact areas. For example, as mentioned in the literature review advocates of revising promotion and tenure criteria to include a broader definition of scholarship suggested these reforms would positively influence promotion and tenure outcomes. Thus several survey items were developed to assess whether the probability of a favorable tenure or promotion decision occurred, or applications for promotion increased. Likewise, advocates have suggested the kinds of reforms explored in this paper would elicit greater congruity between faculty priorities and institutional mission and improve institutional effectiveness, particularly in the area of undergraduate education and relationships with the community. Thus, survey items were created to measure these areas as well.

For the purposes of this study "formal policy reform" was defined as having made one of four changes to institutional reward systems over the last decade: changing mission and planning documents, revising promotion and tenure materials or contract language and criteria, providing flexible workload programs, and/or offering incentive grants to encourage multiple forms of scholarship. These were the policy reforms found most prevalent in the aforementioned review of the literature. CAOs at campuses that made one or more of these policy reforms over the last decade are referred to in this article as "reform institution CAOs." CAOs at institutions that did not make one of these four changes to their reward system over the last decade are referred to in this article as, "traditional institution CAOs," meaning that these campuses did not make one of these four changes, but informal efforts (individual encouragement, unfunded support groups, workshops on portfolio development) may or may not have been initiated on these campuses over the last decade. These two categories are not entirely distinct. A CAO's institution might have been revising promotion and tenure materials as the CAO was completing the survey or initiated a reform other than one of the four reforms named above, so he or she reported that no formal policy reforms had been made at their institution over the last decade when in fact something was in place or about to take place to encourage multiple forms of scholarship. Albeit imperfect, this structure allowed the researcher to understand the impact of the most

popular formal policy reforms for encouraging multiple forms of scholarship on faculty and institutions.

The results reported in this article are based on the responses of 729 or 50% of the CAOs of the 1,452 not-for-profit 4-year colleges and universities identified by the 2000 Carnegie classification system. Approximately 2/3 of CAOs completed the survey on-line, responding to an email invitation to complete a web-based survey, while the remaining 1/3 completed a paper copy mailed to them. These survey responses are representative of the national profile of institutions and CAOs (See Table 1).

The survey data was analyzed using descriptive and univariate statistics. In several cases, independent sample *t*-tests were conducted to compare Reform and Traditional institution CAO's answers to survey questions, considering Reform Institution CAOs as the reference group. Thus positive *t* values represent a greater mean for Reform institution CAOs on the question of interest. Conversely, negative *t* values represent a greater mean for Traditional institution CAO respondents. For comparisons that were between two proportions a *z*-test was conducted instead of a *t*-test to compare the differences in Reform and Traditional CAO responses. This test was more powerful for the kind of data being used and allowed for one-way hypothesis testing. Similar to the *t*-test tables, Reform Institution CAOs were considered the reference group in the *z*-test comparisons.

A one-way ANOVA was performed to determine the differences between institutional type and CAO's answers to the survey questions. One of the assumptions regarding the use of an ANOVA as a statistical analysis is that the variance between groups (institutional types) is equal between them. To determine if the assumption was not violated, Levene's test of homogeneity was performed. In most cases, the Levene's test of homogeneity was significant indicating the groups did not have equal variance between them. Therefore, a Dunnett's C post hoc analysis of unequal variance was conducted to determine the

TABLE 1. Comparison of Sample to National Profile of Institutions

2000 Carnegie Classification of 4-year Non-profit Institutions			Study CAO Survey Institutions (2001–2002)		
Doctoral/Research	259	18%	Doctoral/Research	136	18.7%
Masters	603	41%	Masters	310	42.5%
Baccalaureate	590	41%	Baccalaureate	281	38.5%
			Undetermined	2	0.3%
	<i>N</i> = 1452	100%		<i>N</i> = 729	100%

differences between groups. When the assumption of equal variance was not violated, the ANOVA results were used and Bonferroni multiple comparisons were conducted to determine the statistical significance between institutional type. The alpha level was determined to be 0.05 for all of the analysis calculated.

Independent chi-square tests were conducted when the dependent variables were categorical variables instead of continuous variables. The chi-square tests were used to determine if there was a significant association between the characteristics of the population. While all results are reported in the narrative, because of space limitations only survey responses that yielded significant results are reported in tables. The results of the larger study of which this is one part can be found in O'Meara (2005b).

FINDINGS AND DISCUSSION

In this section, CAO survey responses are broken down by reform and traditional responses, and by institutional type. In some cases these breakdowns are compared to all CAO responses for a sense of context. First, the extent of and kinds of formal policy reform are discussed, followed by findings regarding the impact of policy reform on expectations for faculty evaluation, the faculty evaluation process, promotion and tenure outcomes, and institutional effectiveness. Discussion and implications regarding the key findings follow this section.

The Extent and Kinds of Policy Reform

Findings suggest the majority of 4-year institutions have initiated formal policies/procedures to encourage and reward multiple forms of scholarship over the last decade. Two of every three CAOs (68%) reported that their institution had either changed mission/planning documents, amended faculty evaluation criteria, provided incentive grants, or developed flexible workload programs to encourage and reward a broader definition of scholarship over the last 10 years, and about one of every three (32%) reported that their institutions had not. The most popular formal policy reforms identified by reform CAOs were expanding the definition of scholarship used in faculty evaluation policies (76%) and providing incentive grants to support multiple forms of scholarship (75%) (an institution could identify all of the reforms their campus initiated). About 45% of reform CAOs noted that they had expanded the definition of scholarship written into institutional mission and/or planning documents, and 41% of reform CAOs reported that

TABLE 2. Reform Institution CAOs and Traditional Institution CAO Responses by Institutional Type

Institution Type	Reform	Traditional	Comparison with Carnegie (2000)
Doctoral/Research Universities	88 17.7%	48 21%	259 18%
Master's Colleges and Universities	230 46.1%	80 35%	603 41%
Baccalaureate Colleges	178 35.8%	103 44%	590 41%
Did Not Respond/Could Not Be Determined	2 0.4%	0 0.0%	
Total	498 68.3% 729 (100%)	231 31.7% 729 (100%)	1452 100%

Note: The “Did Not Respond/Could Not Be Determined” Institution Type refers to two institutions in the sample that (a) did not respond to the institution type question and (b) provided no identification that could be used to determine this.

their institution had used the expanded definition of scholarship to develop flexible workload programs.

The extent of reform was also analyzed by three institutional types, Baccalaureate, Masters and Doctoral/Research (See Table 2). A one-way ANOVA was conducted to test the differences between Reform and Traditional groups with respect to institutional type. Results showed that the differences in the distributions of institutional types between the Reform and Traditional groups were statistically significant. Examination of the Institutional Type histograms for each Path shows that the major differences between the groups were a result of a much higher percentage of Master's Colleges reporting reforms and a much higher percentage of Baccalaureate Colleges reporting staying traditional over the last decade (See Fig. 1).

In terms of the kinds of reforms made, Doctoral/Research Universities expanded the definition of scholarship written into institutional mission and/or planning documents significantly more than Master's and Baccalaureate colleges in the last 10 years. Doctoral/Research Universities expanded the definition of scholarship to develop flexible workload programs where faculty can emphasize teaching, integration, discovery, or engagement scholarship and be evaluated and rewarded accordingly significantly more than Baccalaureate Colleges in the last 10 years (See Table 3).

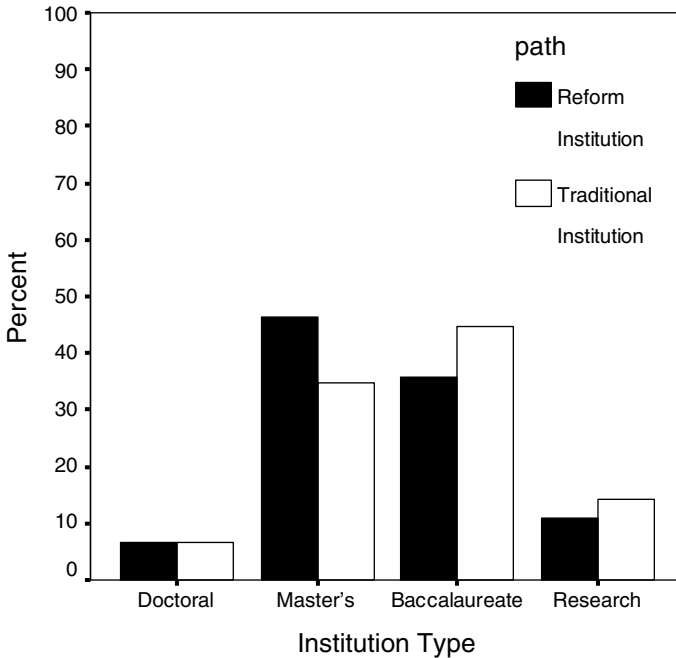


FIG. 1. AN ANOVA Between Reform and Traditional Groups with Respect to Institutional Type. *Distributions of Institutional Type by Path* ($F = 3.20, p < 0.05$).

Given that Reform institutions could have initiated all four or only one of the reforms mentioned above, it was important to explore whether one or any combination of the four reforms was significantly more likely to influence expectations for faculty evaluation, the faculty evaluation process, promotion and tenure outcomes or institutional effectiveness. Thus, one-way ANOVA was conducted to test the differences among the Reform institution CAO respondents with respect to the types of policy reform identified. Analyses were conducted to examine the differences among these responses and those concerning the four impact areas mentioned above. Results showed that there were no statistically significant differences among the types of formal policy change identified by Reform institution CAOs and their subsequent responses to the four impact area survey items. Thus, while significant differences existed between Reform Institution CAOs and Traditional Institution CAO responses, within-group variance for Reform Institution respondents was relatively small, indicating that no one strategy (e.g.

TABLE 3. Refers to the Following Question, “Please Check Each of the Statements That Describe a Change You Made in Your Institution in the Last 10 Years

Question	Doc/Research		Masters		Baccalaureate	
	Mean	SD	Mean	SD	Mean	SD
Our institution expanded the definition of scholarship written into institutional mission and/or planning documents	0.66 ^{M,B}	0.47	0.46	0.5	0.35	0.48
Our institution expanded the definition of scholarship used in faculty evaluation policies	0.74	0.44	0.80	0.4	0.72	0.45
Our institution used an expanded definition of scholarship to develop flexible workload programs where faculty can emphasize teaching, integration, discovery, or engagement scholarship and be evaluated and rewarded accordingly	0.55 ^B	0.50	0.41	0.49	0.32	0.47
Our institution provides incentives, such as faculty development grants, to support multiple forms of scholarship	0.74	0.44	0.75	0.43	0.76	0.43

Note: *M* = The mean difference is significantly different than Masters colleges ($p < 0.05$), *B* = The mean difference is significantly different than Baccalaureate Colleges ($p < 0.05$).

redefining scholarship in mission or faculty evaluation, incentive grants, or flexible workload programs) is significantly more likely to trigger change in the before-mentioned areas. However, initiating any one, all four, or any combination of the four strategies explored in this study (reform) is significantly more likely to influence these areas than inducing none (traditional).

Expectations for Faculty Evaluation

CAOs were asked, for the purpose of faculty evaluation, whether publication productivity, teaching, engagement/professional service, service to the institution, and service to the profession/discipline count more or less today than they did 10 years ago. The majority of all CAOs (51%) reported that publication productivity is counting more today than 10 years ago on their campus and that there was no significant difference found between reform and traditional responses on this item. However, Reform institution CAOs were significantly more likely than traditional institution CAOs to report that teaching ($t(694) = 4.11, p < .05$), engagement/professional service ($t(680) = 7.63, p < .05$), service to the institution/citizenship ($t(686) = 3.93, p < .05$), and service to the profession/discipline ($t(678) = 2.73, p < .05$) are counting more today than 10 years ago (See Table 4). The majority of CAOs at traditional institutions reported each of these activities counted about the same as 10 years ago.

When broken down by institutional type (See Table 5), teaching was found to be significantly more important for faculty evaluation now

TABLE 4. Results of t-Tests Comparing Reform and Traditional Institution CAO Responses to Question, "For Purposes of Faculty Evaluation, Do the Following Faculty Activities Count More or Less Today Than They Did 10 Years Ago?"

Question	Reform			Traditional			<i>t</i>
	<i>N</i>	Mean	SD	<i>N</i>	Mean	SD	
Publication Productivity	462	2.53	0.59	219	2.47	0.50	1.34
Teaching	469	2.41	0.51	227	2.24	0.48	4.11***
Engagement/Professional Service	464	2.39	0.55	218	2.06	0.43	7.63***
Service to the Institution/Citizenship	465	2.16	0.55	223	2.00	0.43	3.93***
Service to the Profession/Discipline	460	2.18	0.53	220	2.07	0.37	2.73**

Note: Possible responses were (1) Count less than 10 years ago, (2) Count about the same as 10 years ago, or (3) Count more than 10 years ago.

** $p < 0.01$, *** $p < 0.001$.

TABLE 5. Refers to the Following Question, "For the Purpose of Faculty Evaluation, Do the Following Faculty Activities Count More or Less Today Than They Did 10 Years Ago?"

Question	Doc/Research		Masters		Baccalaureate	
	Mean	SD	Mean	SD	Mean	SD
Publication Productivity	2.56	0.54	2.53	0.57	2.45	0.57
Teaching	2.60 ^{MB}	0.54	2.31	0.51	2.28	0.46
Engagement/Professional Service	2.31	0.57	2.32	0.57	2.22	0.49
Service to the Institution/Citizenship	2.02	0.54	2.15	0.56	2.11	0.47
Service to the Profession/Discipline	2.06 ^M	0.45	2.20	0.53	2.13	0.47

Note: M = The mean difference is significantly different than Masters colleges ($p < 0.05$), B = The mean difference is significantly different than Baccalaureate Colleges ($p < 0.05$).

than 10 years ago for Doctoral/Research Universities than Master's and Baccalaureate Colleges. Service to the Profession/Discipline was found to be significantly more important to faculty evaluations for Master's Colleges than Doctoral/Research Universities.

The Faculty Evaluation Process

CAOs were asked what degree of influence specific criteria (e.g. impact of the scholarship on the discipline or on students) had on the final decision by faculty committees to recommend or deny tenure and promotion today (See Table 6). The majority of CAOs at traditional institutions noted the traditional criteria as influences on promotion and tenure (i.e. whether scholarly products are published (91%), where scholarly products are published (85%), and impact on the disciplines (85%). While the majority of reform institution CAOs also reported these traditional criteria as influences, they also identified criteria that are often considered critical to the positive and effective evaluation of teaching and engagement (i.e. the impact of the scholarship on the state or local community, the institution, the students, the mission of the institution, and the academic unit) as equal to or greater influences on evaluation of scholarship. *T*-test analysis revealed that Reform institution CAOs were significantly more likely than traditional CAOs to observe the impact of scholarship on the local community and/or state ($t(655) = 4.75, p < .05$), the impact on the institution ($t(659) = 6.00, p < .05$), the impact on students ($t(662) = 5.25, p < .05$), on the mission of the institution ($t(654) = 5.03, p < .05$), and on the priorities of

TABLE 6. Results of t-Tests Comparing Reform and Traditional Responses to the Question, "What Degree of Influence Do the Following Issues Have on the Final Decision by Faculty Committees to Recommend or Deny Tenure and Promotion Today?"

Question	Reform			Traditional			<i>t</i>
	N	Mean	SD	N	Mean	SD	
Whether scholarly products are published	438	2.65	0.47	210	2.69	0.46	-1.12
Where scholarly products are published	450	2.30	0.62	215	2.41	0.64	-2.10*
The impact of the scholarship on the local community and/or state	444	1.97	0.59	213	1.75	0.52	4.75***
The impact of scholarship on the profession/discipline	449	2.35	0.58	217	2.39	0.65	-0.79
The impact of scholarship on the institution	445	2.27	0.60	216	1.97	0.59	6.00***
The impact of scholarship on students	448	2.47	0.59	216	2.21	0.63	5.25***
That the scholarship resulted in significant external funding	444	2.10	0.70	206	2.06	0.73	0.753
The originality of the scholarship	447	2.30	0.61	211	2.39	0.67	-1.76
The mission of the institution	443	2.58	0.58	213	2.32	0.66	5.03***
The priorities of the academic unit	438	2.39	0.65	210	2.16	0.68	4.14***

Note: Possible responses were (1) No Influence, (2) Minor Influence, or (3) Major Influence, * $p < 0.05$, *** $p < 0.001$.

the academic unit ($t(646) = 4.14, p < .05$) as influences on promotion and tenure decisions. CAOs at traditional institutions were significantly more likely than CAOs at reform institutions to report the criteria of where scholarly products are published ($t(663) = -2.10, p < .05$) as an influence on decisions.

When broken down by institutional type (See Table 7), whether scholarly products are published was significantly more influential for Doctoral/Research Universities regarding issues of tenure than Master's or Baccalaureate Colleges and whether scholarly products are published was significantly more influential for Master's Colleges regarding issues of tenure than Baccalaureate Colleges. Also, where scholarly products are published was significantly more influential on the issues of tenure for Doctoral/Research Universities than Master's or Baccalaureate Colleges and more influential for Master's Colleges than Baccalaureate

TABLE 7. Refers to the Following Question, "What Degree of Influence Do the Following Issues Have on the Final Decision by Faculty Committees to Recommend or Deny Tenure and Promotion?"

Question	Doc/Research		Masters		Baccalaureate	
	Mean	SD	Mean	SD	Mean	SD
Whether scholarly products are published	2.93 ^{MB}	0.26	2.68 ^B	0.47	2.50	0.50
Where scholarly products are published	2.82 ^{MB}	0.38	2.34 ^B	0.61	2.08	0.61
The impact of the scholarship on the local community and/or state	1.93	0.56	1.95 ^B	0.59	1.81	0.58
Impact of the scholarship on the profession/discipline	2.69 ^{MB}	0.52	2.36 ^B	0.58	2.20	0.61
The impact of the scholarship on the institution	2.17	0.63	2.20	0.61	2.14	0.61
The impact of the scholarship on students	2.16 ^{MB}	0.61	2.40	0.63	2.48	0.60
That the scholarship resulted in significant external funding	2.58 ^{MB}	0.59	2.11 ^B	0.71	1.82	0.64
The originality of the scholarship	2.72 ^{MB}	0.50	2.33 ^B	0.63	2.13	0.63
The mission of the institution	2.45	0.61	2.47	0.60	2.53	0.65
The priorities of the academic unit	2.46 ^B	0.62	2.40 ^B	0.64	2.15	0.71

Note: *M* = The mean difference is significantly different than Masters colleges ($p < 0.05$),
B = The mean difference is significantly different than Baccalaureate Colleges ($p < 0.05$).

Colleges. The impact of the scholarship on the local community and/or state was significantly more influential for Master's Colleges than Baccalaureate Colleges. The impact of scholarship on the profession/discipline was significantly more influential today for Doctoral/Research Universities than Master's and Baccalaureate Colleges and significantly more significant for Master's Colleges than Baccalaureate Colleges. The impact of scholarship on students was significantly less influential for Doctoral/Research Universities than for Master's and Baccalaureate Colleges. Scholarship resulting in significant external funding was significantly more influential for Doctoral/Research Universities than Master's and Baccalaureate Colleges and was significantly more influential for Master's Colleges than Baccalaureate Colleges. The originality of the research was significantly more influential for Doctoral/Research Universities than Master's and Baccalaureate Colleges and significantly more influential for Master's Colleges than Baccalaureate Colleges.

The priorities of the academic unit were significantly less influential for Baccalaureate Colleges than Doctoral/Research Universities and Master's Colleges.

Promotion and Tenure Outcomes

It is very difficult to assess the impact of formally encouraging multiple forms of scholarship on reward systems. Questions regarding change in reward systems over the last decade were asked in several different ways including whether or not there had been an increase in applications for promotion and tenure, or in the percentage that emphasized teaching and engagement scholarship, whether there was a change in chances to be promoted and/or tenured based on this work, and probability of success. Some of the findings seem to contradict each other. For example, 22% or less of all CAOs observed an increase in the probability of a favorable tenure decision, applications for promotion from associate to full professor, and probability of a favorable decision to full professor over the last decade. Likewise, under 23% of Reform institution CAOs reported increases in the probability of a favorable tenure decision or promotion, and applications for promotions to full professor. Surprisingly, when a *z*-test was conducted there were no significant differences found between reform and traditional CAO responses in this area of applications or probability of a favorable tenure or promotion. The fact that only a minority of reform CAOs observed that the number of applications from associate to full professor had increased, contradicts those who suggested formal reforms would positively impact this aspect of mid and late career. In addition, when the issue of applications and probability were analyzed by institutional type through Chi-square analysis there were no significant differences found between Baccalaureate, Masters, and Doctoral/Research institutions on these questions.

However, additional questions were asked of CAOs to probe how formal policy reform may/may not have influenced actual promotion and tenure decisions. CAOs were asked what percentage of tenure and promotion cases over the last 5 years emphasized their work in teaching scholarship or engagement scholarship and then whether the majority of those cases were successful. Over half (57%) of all CAOs reported that 50–100% of their promotion and tenure cases had emphasized teaching scholarship and 27% of all CAOs reported that 50–100% of their cases had emphasized engagement scholarship. When the two groups were compared, *t*-tests revealed Reform institution CAOs were significantly more likely to report a higher percentage of tenure and promotion cases

TABLE 8. Results of t-Tests Comparing Reform and Traditional Responses to the Question, “Over the Last 5 Years, About What Percentage of Tenure and Promotion Cases Emphasized Their Work in:”

Question	Reform CAOs			Traditional CAOs			<i>t</i>
	<i>N</i>	Mean	SD	<i>N</i>	Mean	SD	
Teaching Scholarship	421	3.54	1.24	200	3.30	1.50	2.14*
Engagement Scholarship	401	2.50	0.99	180	2.09	1.16	4.40***

Note: Possible responses were (1) 0%, (2) 25%, (3) 50%, (4) 75%, or (5) 100%.

* $p < 0.05$, *** $p < 0.001$.

TABLE 9. Response to the Question, “Over the Last 5 Years, About What Percentage of Tenure and Promotion Cases Emphasized Their Work in:”

Question	Doc/Research		Masters		Baccalaureate	
	Mean	SD	Mean	SD	Mean	SD
Teaching Scholarship	1.87 ^{MB}	0.34	1.95	0.21	1.97	0.17
Engagement Scholarship	1.84	0.37	1.88	0.32	1.92	0.28

Note: *M* = The mean difference is significantly different than Masters colleges ($p < .05$), *B* = The mean difference is significantly different than Baccalaureate Colleges ($p < .05$).

that emphasized their work in teaching ($t(619) = 2.14, p < .05$) and engagement scholarship ($t(579) = 4.40, p < .05$) than traditional CAO's (See Table 8). When this question was broken down by institutional type (See Table 9), Research/Doctorate universities had a significantly lower percentage of tenure and promotion cases that emphasized teaching scholarship than Master's and Baccalaureate Colleges over the last 5 years. Master's Colleges had a significantly lower percentage of tenure and promotion cases that emphasized teaching scholarship than Baccalaureate Colleges over the last 5 years.

When CAOs were asked what percentage of those same cases were successful, over 50% of all CAOs reported that the majority of the teaching scholarship and engagement scholarship cases were successful. Less than 6% of all CAOs said the cases were unsuccessful in each category; rather the differences were made up by 15–35% of all CAOs not knowing or not responding to the question. When the groups were compared, reform institution CAOs reported slightly more successful teaching and engagement cases than traditional institution CAOs. For

example, engagement scholars were reported to be successful by 58% of reform institution CAOs, compared to 36% of traditional institution CAOs. Traditional institution CAOs were slightly more likely than reform institution CAOs to report that they did not know the success rate of these candidates, or did not respond to the question. However when *z*-tests were conducted on this question, no significant difference was found between reform and traditional CAOs in terms of the success of the teaching and engagement cases. There was also no significant difference found between institutional types in terms of whether the majority of those cases were successful.

CAOs were also asked whether chances to achieve tenure for a faculty member who excels in teaching and/or engagement and completes adequate research had increased, stayed about the same or decreased over the last 10 years and whether the number of faculty who were tenured or promoted based primarily on the scholarship of teaching and learning or engagement had increased, stayed about the same or decreased over the last 10 years (See Table 10). *T*-tests indicate reform institution CAOs were significantly more likely than traditional institution CAOs to report that chances to achieve tenure and promotion based on teaching ($t(632) = 6.85, p < .05$), ($t(680) = 4.14, p < .05$) or engagement ($t(604) = 6.40, p < .05$) ($t(651) = 4.85, p < .05$) have increased over the last decade and that the number of faculty tenured or promoted based primarily on the scholarship of teaching and learning ($t(636) = 5.95, p < .05$) or engagement ($t(572) = 5.83, p < .05$) has increased. When these survey responses were broken down by institutional type (See Table 11), Masters colleges were significantly more likely than Baccalaureate colleges to report increased chances to achieve tenure for a faculty member who excels in teaching and completes adequate research, chances to achieve tenure for a faculty member who excels in engagement/professional service and completes adequate research, and chances to be promoted to full professor for a faculty member who excels in engagement/professional service and completes adequate research in the last 10 years. In addition, Doctoral/Research universities were significantly more likely than Baccalaureate colleges to report the chances to be promoted to full professor for a faculty member who excels in teaching and completes adequate research had increased.

Institutional Effectiveness

Forty-five percent of all CAOs reported an increase in congruence between faculty priorities and institutional mission and 55% reported the ability of the institution to meet its goals and objectives had improved

TABLE 10. Results of t-Tests Comparing Reform and Traditional CAO Responses to Question, “Please Indicate if Any of the Following Events Have Increased, Stayed about the Same, or Decreased over the Last 10 Years”

Question	Reform CAOs			Traditional CAOs			t
	N	Mean	SD	N	Mean	SD	
The chances to achieve <i>tenure</i> for a faculty member who <i>excels</i> in <i>teaching</i> and completes adequate research	428	2.33	0.51	206	2.05	0.42	6.85***
The chances to be <i>promoted to full professor</i> for a faculty member who <i>excels</i> in <i>teaching</i> and completes adequate research	463	2.27	0.57	219	2.08	0.45	4.14***
The chances to achieve <i>tenure</i> for a faculty member who <i>excels</i> in <i>engagement/professional service</i> and completes adequate research	412	2.19	0.55	194	1.90	0.42	6.40***
The chances to be <i>promoted to full professor</i> for a faculty member who <i>excels</i> in <i>engagement/professional service</i> and completes adequate research	448	2.17	0.57	205	1.95	0.48	4.85***
The number of faculty who are <i>tenured</i> or <i>promoted</i> based primarily on the scholarship of <i>teaching</i> and learning	435	2.24	0.59	203	1.95	0.54	5.95***
The number of faculty who are <i>tenured</i> or <i>promoted</i> based primarily on <i>engagement/professional service</i> with the community	399	2.03	0.55	175	1.74	0.52	5.83***

TABLE 11. Refers to the Following Question, "Please Indicate if Any of the Following Events Have Increased, Stayed About the Same, or Decreased Over the Last 10 Years"

Question	Doctoral		Masters		Baccalaureate	
	Mean	SD	Mean	SD	Mean	SD
The chances to achieve <i>tenure</i> for a faculty member who <i>excels</i> in <i>teaching</i> and completes adequate research	2.30	0.61	2.28 ^B	0.51	2.17	0.43
The chances to be <i>promoted</i> to <i>full professor</i> for a faculty member who <i>excels</i> in <i>teaching</i> and completes adequate research	2.31 ^B	0.64	2.23	0.57	2.12	0.46
The chances to achieve <i>tenure</i> for a faculty member who <i>excels</i> in <i>engagement/professional service</i> and completes adequate research	2.09	0.64	2.16 ^B	0.53	2.04	0.47
The chances to be <i>promoted</i> to <i>full professor</i> for a faculty member who <i>excels</i> in <i>engagement/professional service</i> and completes adequate research	2.08	0.62	2.17 ^B	0.58	2.03	0.50
The <i>number of faculty</i> who are <i>tenured</i> or <i>promoted</i> based primarily on the scholarship of <i>teaching</i> and learning	2.15	0.65	2.17	0.61	2.12	0.54
The number of faculty who are <i>tenured</i> or <i>promoted</i> based primarily on <i>engagement/professional service</i> with the community	1.94	0.64	1.98	0.58	1.90	0.50

Note: *M* = The mean difference is significantly different than Masters colleges ($p < 0.05$), *B* = The mean difference is significantly different than Baccalaureate Colleges ($p < 0.05$).

TABLE 12. Institutional Effectiveness Results of z-Tests Comparing Reform and Traditional Responses to Question, “Please Check Any Area of Faculty or Institutional Activity That Has Increased or Improved at Your Institution During the Last 10 Years”

Question	An IMPROVEMENT in:							z
	Reform Institution CAOs			Traditional Institution CAOs				
	N	Mean	SD	N	Mean	SD		
Attention to the quality of undergraduate learning	460	0.78	0.41	214	0.71	0.45	1.97*	
Relationships with the community	460	0.55	0.49	214	0.51	0.50	0.97	
The ability of the institution to meet its goals and objectives	460	0.62	0.48	214	0.55	0.49	1.73	
Congruence between faculty priorities and institutional mission	459	0.53	0.50	214	0.40	0.49	3.14**	

Note: Possible responses were (0) Not Checked or (1) Checked.

* $p < 0.05$, ** $p < 0.01$.

over the last decade. Relationships with the community were reported to have improved by 50% of all CAOs and attention to the quality of undergraduate learning was reported to have improved by 70% of all CAOs over the last decade. However, when z-tests were conducted Reform Institution CAOs were significantly more likely than Traditional Institution CAOs to report an increase in congruence between faculty priorities and institutional mission and attention to the quality of undergraduate learning (See Table 12). There were no significant differences found between reform and traditional institutions in the areas of improved relationships with the community and ability of the institution to meet goals and objectives.

When survey responses in this area were broken down by institutional type Baccalaureate colleges were significantly more likely than Master’s colleges to report improvement in attention to the quality of undergraduate learning ($\chi^2 (2, n = 673) = 6.45, p < .05$). There were no other significant differences found between these three institutional type categories.

In summary, findings from this national study of CAOs showed that campuses that initiated formal reforms to encourage multiple forms of scholarship were significantly more likely than their counterparts to:

- Report that teaching, engagement/professional service, service to the institution/citizenship, and service to the profession/discipline count more now than 10 years ago in faculty evaluation. The majority of CAOs at traditional institutions reported each of these activities counted about the same as 10 years ago.
- Report that the impact of scholarship on the local community and/or state, on the institution, on students, on the mission of the institution, and on the priorities of the academic unit are influences on promotion and tenure decisions.
- Report a higher percentage of tenure and promotion cases that emphasized their work in teaching and engagement scholarship.
- Report that chances to achieve tenure and promotion based on teaching or engagement have increased over the last decade and that the number of faculty tenured or promoted based primarily on the scholarship of teaching and learning or engagement has increased. However, these findings seem more related to the increased number of applicants emphasizing teaching and engagement scholarship in their portfolios than to a change in the probability of achieving tenure.
- Report an increase in congruence between faculty priorities and institutional mission and improvement in attention to the quality of undergraduate education over the last decade.

When findings regarding extent and kinds of reform, expectations, the process of evaluation, promotion and tenure outcomes and institutional effectiveness were broken down into three major institutional types (Baccalaureate, Masters, and Doctoral/Research) there were three types of findings: there were significant differences found between institutional types which follow the traditional emphasis and history of roles and rewards of these institutions, significant differences found between institutional types that seem to have been influenced by reform, and finally a lack of significant differences found between institutional types in areas where they might have been expected.

We would expect to find traditional criteria typically associated with assessment of research (i.e. whether scholarly products are published; where scholarly products are published; the originality of the work; that it results in external funding; impact of the scholarship on the profession/discipline) as having the greatest influence on promotion and tenure decisions in Research universities, then Masters, then Baccalaureate institutions and this was found. Predictably, the impact of scholarship on students was less significant for promotion and tenure decisions in Doctoral institutions than Masters and Baccalaureate institutions. Likewise, we might have expected that Baccalaureate institutions would have

a significantly greater percentage of promotion and tenure cases that emphasized teaching scholarship than Doctoral and Masters and this was found. Baccalaureate College CAOs were significantly more likely than Master's College CAOs to report an improvement in attention to the quality of undergraduate learning, and this is consistent with the strong mission of teaching and service at these institutions. Research/Doctorate universities had a significantly lower percentage of tenure and promotion cases that emphasized teaching scholarship than Master's and Baccalaureate Colleges over the last 5 years, and Master's Colleges had a significantly lower percentage of tenure and promotion cases that emphasized teaching scholarship than Baccalaureate Colleges over the last 5 years. Each of these emphases is what might be expected regardless of reform because they are consistent with previous faculty roles and rewards at these institutions.

However, there were also findings that suggest the broader definition of scholarship may have been moving these institutions to a greater balance between types of scholarship and criteria used to assess scholarship in reward systems. For example, Doctoral/Research universities were more likely than Masters and Baccalaureate institutions to observe that teaching had increased in its importance in faculty evaluation. Doctoral/Research universities were also more likely than Baccalaureate institutions, and Masters more likely than Baccalaureate, to observe that chances for a faculty member who excels in teaching and completes adequate research to be promoted to full professor had increased. This suggests Doctoral/Research institutions have made some progress in elevating the status of teaching as a form of scholarship within their reward systems, something Boyer (1990) urged these institutions to do in *Scholarship Reconsidered*.

Given that a higher percentage of Masters colleges reported reforms and a higher percentage of Baccalaureate institutions stayed traditional, it was perhaps not surprising that some of the greatest expansion in what counts, how it is evaluated, and promotion and tenure outcomes were observed by masters CAOs. Masters institution CAOs were more likely than Baccalaureate institutions to report increased chances to achieve tenure for a faculty member who excels in teaching, or one who excels in engagement, and chances for promotion to full professor for a faculty member who excels in engagement. The impact of scholarship on the local community or state had a greater influence in Masters institutions than Baccalaureate institutions which is consistent with recent research that has showed the expanded involvement of these institutions in university-community partnerships and faculty professional service (Berberet, 1999).

There were no significant differences found between institutional types in terms of the reported success of faculty who emphasized teaching and engagement for tenure or promotion or the reported probability of a favorable tenure or promotion. There were also no significant differences found between institutional types on the number of applications submitted to be promoted to full professor.

DISCUSSION AND IMPLICATIONS

In this section key findings are discussed and implications drawn for our understanding of the impact of reform to encourage multiple forms of scholarship on faculty and institutions in general, and by institutional type.

Reforming Reward Systems to Encourage Multiple Forms of Scholarship Has Made a Difference

First, it is significant in and of itself that 2/3 of CAOs reported having made one or more of the four reforms explored in this study to encourage multiple forms of scholarship over the last decade. These findings support the claims of various advocates that this movement has indeed affected campuses across the country, in every type of 4-year institution. Second, and perhaps more importantly, campuses that made one or more of these reforms in the last decade looked significantly different than those that did not in several areas related to reward systems and institutional effectiveness. At reform institutions engagement and teaching scholarship counted more than they did a decade ago, the criteria used to assess scholarship were more conducive to a broader definition of scholarship, there were a greater percentage of tenure and promotion cases that emphasized their work in teaching and engagement scholarship, and CAOs were significantly more likely to report an increase in congruence between faculty priorities and institutional mission, and improved attention to undergraduate education.

It is obviously important to ask the “chicken or the egg” question for some of these areas, that is, did the policy reforms themselves move these cultures to the differences found (e.g. a broader set of criteria for assessing scholarship) or did this exist before the reforms and act as a catalyst to their initiation. However, in another survey question, CAOs were asked to what degree they saw any increases or improvements that they had noted as resulting from their reforms. In each case reform CAOs were significantly more likely than traditional CAOs to view their efforts as related to

changes in reward systems. Thus, at least from the perspective of CAOs we can reasonably assume these four policy reforms have had some, though not all, of their advocate's intended impact. "Some" is the appropriate word because expanding the definition of scholarship used to evaluate faculty work was intended by Boyer and others to mute the trend toward rising research expectations at the expense of other areas of faculty work. However, it seems clear that the four reforms explored in this study did not mute the very strong trend toward rising research expectations, rather they just contributed to a phenomenon that was already in motion of increasing expectations in every area of faculty work. These findings are consistent with Braxton et al.'s (2002) finding that the scholarship of discovery persists as the most legitimate and preferred method of faculty engagement, and with recent studies showing faculty time allocation toward research in all institutional types has increased over the last decade (Dey, Milem, and Berger, 1997).

One key explanation for the lack of influence of reforms on muting the trend toward research expectations is what has been described as the "pursuit of prestige" (Ward and Wolf-Wendel, 2004). While this study did not differentiate by institutional prestige, many researchers have found that "upwardly mobile" or "striving campuses" are more focused on developing research cultures and thus reward systems that emulate research university standards (Finnegan and Gamson, 1996; Morphew, 2002; Ward and Wolf-Wendel, 2004). Campuses experiencing this kind of mission drift are the least likely to see positive affects from reforming definitions of scholarship. These reforms are more likely to be "virtually adopted" while increasing teaching expectations, service requirements, research and external funding expectations are heaped onto the backs of faculty, even at Baccalaureate and Masters campuses.

The Reforms Are More Likely Changing the Inputs to and Process of Promotion and Tenure, Not the Outcomes

Interpreting these findings in terms of the impact of formal policy reform on promotion and tenure outcomes is slippery and must be done carefully. Findings from this study do not consistently show that initiating formal policy reform increases faculty chances of success in promotion and tenure decisions. Over 50% of all CAOs said the majority of the teaching scholarship and engagement scholarship cases were successful but no significant differences were found in terms of the success of these candidates by reform or traditional campuses or between institutional types. Why is this? Chait (2002) observes that, "the probability of a favorable decision among candidates formally considered for tenure

has not varied by institutional type and also has not changed materially [over the past quarter century]" (Chait, 2002, p. 25), with the probability of tenure last calculated as a little better than 7 in 10 by the National Center for Educational Statistics (1993) (Chait, 2002, p. 18). Overall, the majority of all CAOs (over 50%) reported that the chances for tenure and promotion for teaching and engagement scholars stayed the same over the last decade. There was no significant difference found between reform and traditional institutions on questions regarding probability of favorable tenure and promotion decisions. The consistency between NCES and these CAO findings suggests a great stability in the chances for promotion and tenure once a candidate is formally reviewed, a stability that may likely be immune from policy reform. In other words, a certain percentage of faculty will be rejected and will be successful in promotion and tenure no matter what scholarship they submit for review. Reform CAOs likely reported that chances to achieve tenure/promotion for teaching and service scholars were greater than a decade ago and that there had been increases in the number of teaching and service scholars who were tenured and promoted because reform institutions were more likely to have engagement and teaching scholars apply for tenure and promotion emphasizing their work in these areas. Once these faculty (like any faculty in the traditional institutions) applied, they seemed to be as successful as any others. The major difference between reform and traditional institutions was that more teaching and service scholars emphasized this work in their portfolios and therefore reform CAOs reported significantly higher numbers of faculty who were promoted based on this work. It seems likely that this finding was the result of CAOs seeing more teaching and engagement scholars retained to the tenure and/or promotion decision, and the odds being favorable at that point, thinking more were being successful than in the past. The fact that no significant differences were found between institutional types in terms of success of teaching and engagement cases reinforces this conclusion. Therefore, formal policy reform seems to have the greatest impact on the inputs of promotion and tenure decisions, such as the likelihood that candidates will feel comfortable emphasizing teaching and engagement in their applications, without necessarily changing their chances of success at the decision point.

Context Counts

Boyer (1990) argued institutional reward systems should emphasize the forms of scholarship most appropriate to their missions and even developed prescriptions for the types of scholarship he thought

colleges and universities in each institutional type should emphasize (e.g. teaching and integration recommended to have a greater emphasis among Baccalaureate and Masters campuses, research and application within Doctoral and Research institutions). Findings from this study suggest the Boyer framework and formal policy reform to support it has been helpful for Baccalaureate, Masters, and Doctoral/Research universities in addressing some of their major reward system challenges, although there is much work to be done. The two greatest challenges the data suggest for institutions when broken down by institutional type relate to criteria used to assess scholarship and the number of promotion and tenure cases that emphasize teaching and engagement. In both cases, the findings were predictable, with Doctoral/Research institutions using the more traditional criteria and having the least number of promotion and tenure cases that emphasized teaching and engagement and Baccalaureate institutions the broader criteria and the greatest number of cases. Braxton et al. (2002) concluded from their research that, "the process used to assess faculty scholarship is a main barrier to the institutionalization of the four domains (p. 75)." They then went on to specifically refer to criteria used to assess scholarship. In order for a broader definition of scholarship to become institutionalized across the higher education system, broader criteria must begin to show greater importance in Doctoral/Research universities, and more faculty must feel comfortable making a case for themselves as being worthy of promotion and tenure for having engaged in these newer forms of scholarship. Given that Research universities often act as leaders, encouraging other campuses to follow suit, if these institutions made significant strides in balancing their reward systems, Baccalaureate and Masters institutions would likely feel more confident doing the same, even though adjusting the balance would be different for each institutional type.

CAOs Are Critical to Reform

While department chairs, faculty leaders and deans play critical roles, the ways that standards for scholarship are defined, encouraged and rewarded institution-wide will continue to be in the hands of Chief Academic Officers. CAOs are responsible for linking faculty recruitment to institutional mission, for promoting ongoing faculty development, for managing scarce resources for supporting faculty scholarship, for working with institutional committees to make changes to faculty evaluation criteria and processes, for articulating institutional expectations, and finally, for evaluating each promotion and tenure case prior to

forwarding it with a recommendation to the president (Diamond, Martin, and Samels, 1997; Austenson, 1997). It will be critical for CAOs to be aware of and involved in the national debate over what constitutes scholarship and the appropriate balance of teaching, research and service in the evaluation of faculty (Austenson, 1997). CAOs should be aware of some of the consequences of "academic ratcheting" in terms of lost distinctiveness and ability to fulfill multiple institutional missions and goals. Different strategies should be considered by CAOs for alleviating the need for faculty to excel in every area of work and scholarship simultaneously. The findings of this study should suggest to CAOs that the reforms explored here can play critical structural, human resource, political and symbolic purposes in supporting teaching and engagement scholars, raising the visibility and importance of this work on campus, and moving toward greater alignment between faculty rewards and mission.

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REFERENCES

- Aldersley, S. F. (1995). Upward drift is alive and well: Research/doctoral model still attractive to institutions. *Change* 27(5): 50–56.
- Austenson, R. A. (1997). Faculty relations and professional development: Best practices for the chief academic officer. In: Martin, J., Samels, J., and Associates (eds.), *First Among Equals: The Role of the Chief Academic Officer*. The Johns Hopkins University Press, Baltimore.
- Baldwin, R. G. (1990). Faculty career stages and implications for professional development. In: Schuster, J. H., and Wheeler, D. W. (eds.), *Enhancing Faculty Careers: Strategies for Development and Renewal*, Jossey-Bass, San Francisco, CA, pp. 20–40.
- Berberet, J. (1999). The professorate and institutional citizenship: Toward a scholarship of service. *Liberal Education* 85(4): 33–39.
- Boice, R. (1992). *The New Faculty Member*. Jossey-Bass, San Francisco.
- Boyer, E. (1990). *Scholarship Reconsidered*, Carnegie Foundation for the Advancement of Teaching, Princeton.
- Braskamp, L. (2003). *Fostering Student Development Through Faculty Development: A National Survey of Chief Academic Officers at Church-related Colleges*, Loyola University, Chicago, IL.

- Braxton, J. M. and Hargens, L. L. (1996). Variation among academic disciplines: Analytical frameworks and research. In Smart, J. C. (ed.), *Handbook of Theory and Research*, Agathon Press, New York, Vol. II, pp. 1–46.
- Braxton, J., Luckey, W., and Holland, P. (2002). *Institutionalizing a Broader View of Scholarship Through Boyer's Four Domains*, Jossey-Bass, New Jersey.
- Chait, R. (2002). Why tenure? Why now?. In: Chait, R. (eds.), *The Questions of Tenure*, Harvard University Press, Cambridge, MA, pp. 6–31.
- Clark, B. R. (1987). *The Academic life: Small Worlds, Different Worlds*, The Carnegie Foundation for the Advancement of Teaching, New York.
- Creamer, E. (1998). Assessing faculty publication productivity: Issues of equity. ASHE-ERIC Higher Education Report, 26 (2). Washington, DC: George Washington University.
- Dey, E. L., Milem, J. F., and Berger, J. B. (1997). Changing patterns of publication productivity: Accumulative advantage or institutional isomorphism?. *Sociology of Education* 70(4): 308–323.
- Diamond, R. M. (1993). Instituting change in faculty reward systems. In: Diamond R. M., and Adam B. E. (eds.), *Recognizing Faculty Work: Reward Systems for the Year 2000. New Directions for Higher Education, No 81*. Jossey-Bass, San Francisco, pp. 13–22.
- Diamond, R. M. (1999). *Aligning Faculty Rewards with Institutional Mission: Statements, Policies, and Guidelines*, Anker, Bolton, MA.
- Diamond, R., and Adam, B. (1997). *Changing Priorities at Research Universities: 1991–1996*, Center for Instructional Development, Syracuse University, Syracuse, NY.
- Driscoll, A., and Lynton, E. (1999). *Making Outreach Visible: A Guide to Documenting Professional Service and Outreach*, American Association for Higher Education, Washington, DC.
- Finnegan, D. E., and Gamson, Z. F. (1996). Disciplinary adaptations to research culture in comprehensive institutions. *Review of Higher Education* 19(2): 141–177.
- Fowler, F. (1993). *Survey Research Methods* (2nd ed.), Sage, California.
- Glassick, C. E., Huber, M. T., and Maeroff, G. I. (1997). *Scholarship Assessed: Evaluation of the Professorate*, Jossey-Bass, San Francisco.
- Huber, M. (1998). *Community College Faculty: Attitudes and Trends, 1997*, National center for postsecondary improvement, Stanford, CA.
- Huber, M. (2002). Faculty evaluation and the development of academic careers. In: Carol Colbeck (eds.), *Evaluating Faculty Performance*, Jossey-Bass, San Francisco.
- Hutchings, P., and Shulman, L. (1999). The scholarship of teaching: New elaborations, new developments. *Change* 31(5): 11–15.
- Kezar, A. (2000). Higher education research at the millennium: Still trees without fruit?. *The Review of Higher Education* 23(4): 443–468.
- Lynton, E. (1995). *Making the Case for Professional Service*, American Association for Higher Education, Washington, DC.
- Martin J., Samels J., and Associates. (eds.) (1997). *First Among Equals: The Role of the Chief Academic Officer*. Baltimore: The Johns Hopkins University Press.
- Morphew, C. C. (2002). A rose by any other name: Which colleges became universities. *Review of Higher Education* 25(2): 207–224.
- O'Meara, K. (1997). *Rewarding Faculty Professional Service*, Working paper #19. Boston: New England Resource for Higher Education.
- O'Meara, K. A. (2001). *Scholarship unbound: Assessing service as scholarship for Promotion and tenure*. In: Altbach, P. (eds.), *Studies in Higher Education Dissertation Series*, Routledge Falmer, NY.
- O'Meara, K. (2005a). *Encouraging Multiple Forms of Scholarship in Faculty Work-Life*. Amherst, MA: Unpublished manuscript.

- O'Meara, K. (2005b). Effects of encouraging multiple forms of scholarship nationwide and across institutional types. In O'Meara, K. and Rice, R. E. (eds.), *Faculty Priorities Reconsidered: Rewarding Multiple Forms of Scholarship*. Jossey-Bass, San Francisco.
- Park, S. (1996). Research, teaching, and service: Why shouldn't women's work count?. *The Journal of Higher Education* 67(1): 46-84.
- Prince, G. S. Jr. (2000). A liberal arts college perspective. In: Ehrlich, T. (eds.), *Civic Responsibility and Higher Education*, Oryx Press, Phoenix, AZ, pp. 249-262.
- Rice, R. E. (1996). *Making a Place for the New American Scholar*, American Association for Higher Education, Washington, DC.
- Rice, R. E., and Sorcinelli, M. (2002). Can the tenure process be improved?. In: Chait, R. (eds.), *The Questions of Tenure*, Harvard University Press, Cambridge, MA.
- Rice, E., Sorcinelli, M., and Austin, A. E. (2000). *Heeding new voices Academic careers for a new generation*. New Pathways Working Paper Series inquiry #7, Washington DC, American Association for Higher Education.
- Ruscio, K. P. (1987). The distinctive scholarship of the selective liberal arts college. *Journal of Higher Education* 58(2): 205-222.
- Tierney, W. G., and Bensimon, E. M. (1996). *Promotion and Tenure: Community and Socialization in Academe*, State University of New York Press, Albany.
- Tierney, W. G., and Rhoads, R. A. (1993). *Enhancing promotion, tenure and beyond: Faculty socialization as a cultural process*. ASHE ERIC Higher Education Report No. 6.
- Ward K., and Wolf-Wendel L. (2004). *Academic life and motherhood: Variations by institutional type*. Paper presented at the Annual Conference of the Association for the Study of Higher Education, Portland, Oregon.

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