A Peek Behind the Curtain of Tenure and Promotion

By Clyde Freeman Herreid, Annie Prud'homme-Généreux, Nancy A. Schiller, Ky F. Herreid, and Carolyn Wright

Tenure in any department is serious business, because it means, essentially, employment for life.
—Michael Shermer

The juvenile sea squirt wanders through the sea searching for a suitable rock or hunk of coral to cling to and make its home for life. For this task, it has a rudimentary nervous system. When it finds its spot and takes root, it doesn't need its brain anymore, so it eats it! It's rather like getting tenure.
—Daniel C. Dennett

The tenure and promotion process can be filled with mystery, backbiting, innuendo, jealousy, intrigue, nefarious conspiracy, and honest analysis. Academia is one of the few places in the world that has it—and according to many observers—shouldn't.

We decided to survey the almost 20,000 members of the National Center for Case Study Teaching in Science (NCCSTS) to see how they think the system operates, especially how it deals with pedagogical scholarship. Over 2,000 individuals responded to the 2-minute survey this last May, just as final exams were winding up. The data are interesting but biased. Anyone who is a likely participant in our poll has a serious interest in teaching, so we are not likely to be getting a true cross-sectional sample of the academic community.

The demographic data about the individuals who responded to our survey are important to review. Most individuals hailed from North America, chiefly the United States (94%) and Canada (3.5%). Figure 1 shows that 54% were employed at colleges and universities; this is the group that we originally designed our case collection, workshops, and website for. To our delight, 42% were high school faculty and 2% were middle school teachers. Plainly, these are different populations, and it is important that we identify their individual interests. Virtually all survey respondents were faculty rather than administrators (2%); 60% were tenured. Only 5% were not in a tenure track or were from institutions without a tenure system. As we will note later, most of the participants were life scientists; case studies seem particularly well suited for the biological and health-related fields.

Here are the key questions of the survey, aside from the demographic inquiries:

- How do you believe the following are valued at your institution for tenure and promotion decisions? [What followed were choices of scholarship (research) within the science, technology, engineering, and mathematics (STEM) discipline, teaching within the STEM discipline, scholarship in teaching and publication of results, service within the institution and externally.]

FIGURE 1

Types of institutions where individuals who responded to the NCCSTS poll teach.

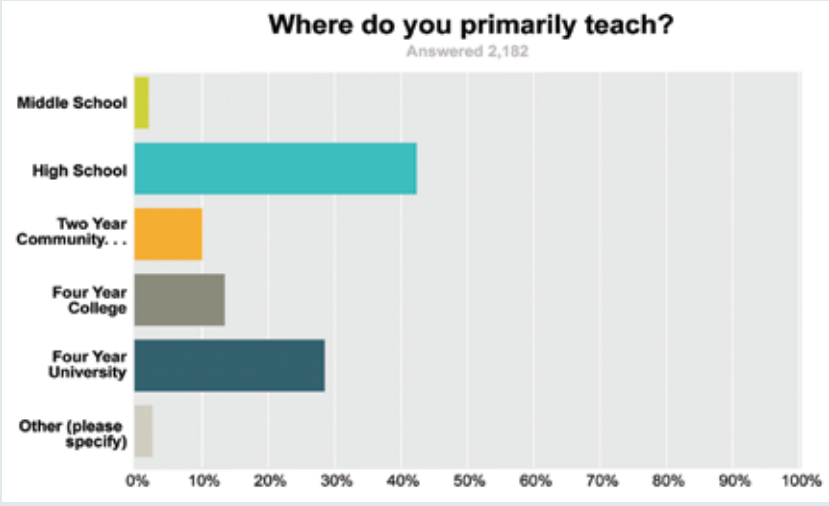

TABLE 1

Responses to the question, "How do you believe the following are valued at your institution for tenure and promotion decisions?" Data are for U.S. high schools.

	Essential	Important	Nice to have	Irrelevant	Negative impact
Scholarship (research) in your STEM discipline with publication of results	3.39%	9.00%	31.89%	55.14%	0.58%
Teaching in your STEM discipline	37.56%	28.14%	17.79%	16.40%	0.12%
Scholarship in teaching and publication of results	2.49%	7.93%	34.44%	54.32%	0.83%
Service both within institution and externally	9.01%	31.11%	34.15%	25.50%	0.23%

- What impact would the publication of teaching materials have on promotion and tenure decisions? [What followed was a list of possibilities including lesson plans, lab exercises, posters, chapters, case studies, videos, etc.]
- What impact would having a case study published by the NCCSTS have on your promotion or tenure?
- What effect would being a reviewer of case studies for NCCSTS have on your promotion and tenure?
- Does your institution have a clear policy about how it evaluates teaching scholarship within STEM disciplines?
- Describe the primary responsibility of the people who are doing the performance evaluations of instructors for promotion and tenure. [Choices were teaching, research, administration, or other.]
- Do you believe that teaching scholarship should play a role in tenure and promotion decisions?
- If you feel comfortable, please give the name of your institution.

Because of sample size considerations, we will concentrate on the U.S. data and divide them into two major categories: participants from middle school, high school, community and junior colleges versus the 4-year colleges and universities.

K–12 and two-year colleges

The K–12 and community college respondents gave similar responses to our poll. To keep this discussion manageable, let us look at the U.S. high school data for 873 teachers as an illustration: 71% were tenured, and 4% said they did not have a tenure system. Life science faculty made up the largest majority (75%), with chemistry a distant second (11%). To see how this community views their tenure and promotion process, see Tables 1 and 2. Canadian high school data were comparable.

It seems evident that scholarship (research) either in the STEM discipline or in teaching is not strongly valued; indeed, over 50% of the teachers said that it was irrelevant in the tenure and promotion process. Teaching in the STEM discipline was where the emphasis was placed, but it is perplexing that this wasn't seen by more people as essential; in fact, 16% said it appeared to be irrelevant. What have we missed here? If teaching isn't essential, what is? Certainly not service. And we are not dealing with administrators; they make up less than 1% of the sample. It may be that some of the 16% are instructors who think teaching is valued but not necessarily within their own STEM discipline; many K–12 instructors have to teach way outside their own field. Given the results here, Table 2 will not come as a surprise.

Once more we see that scholarship and public presentation of the results are weakly appreciated, actually irrelevant according to many of the responding faculty. Lesson plans seem respected a little more than the rest. Note that case studies fare no better than other options, and that was reaffirmed when we asked in a follow-up question: "What impact would having a case study published by the NCCSTS have on your promotion or tenure?" Fifty-three percent (53%) of the high school teachers said "none," whereas 36% admitted "some positive effect." A later question turned up an even weaker positive value for serving as a reviewer of case studies. Because scholarship on teaching is so faintly valued, maybe it is not surprising that a huge majority (86%) of the schools don't have an explicit policy

about it; it seems to be ignored. Still when we asked, "Do you believe that teaching scholarship should play a role in tenure and promotion decisions?" 43% of the teachers said yes, 22% said no, and 30% had no opinion.

Now we come to perhaps the crux of the matter: Who makes the decisions about who is promoted and gets tenure? The answer 90% of the time is administrators; 10% are teachers' decisions. In middle schools the answer is the same. In community colleges the picture begins to change: Administrators account for 52% of the decisions, whereas teachers account for 40% of the responses.

Four-year colleges and universities

The statistics for four-year colleges and for universities in the United States are similar, as are the figures from universities in Canada. Focusing solely on four-year U.S. universities, our results came from 548 individuals in this category who responded to our survey, 54% of whom are tenured and 4% are administrators. Most of the 40% untenured people in this group are in a system with a tenure system in place. Unfortunately, we did not ask if this system only includes research faculty or includes teachers as well. Again, a large proportion of the faculty (80%) said they were life scientists, with chemistry and the social sciences coming in at distant seconds with 5% each. Tables 3 and 4 show the data.

Universities say they are in the business of producing original research, and over 80% of the instructors agree that it is essential or important. It will make parents happy to see that over 80% said teaching in their STEM discipline is also essential or important to tenure and promotion. Scholarship in teaching is definitely less valued than the above categories, but still 40% replied it is essential or important; 12% said it is irrelevant. (Contrast this to the 10% [essential or important] and 50% [irrelevant] values of the K–12 teacher.) Table 3 shows teaching scholarship is even less valued than service, where 70% of the higher education folks say the latter is important or essential.

Esteem is not high for scholarship in teaching in the current system; Table 4 shows only 40% of the polled believed it plays an essential or important role in tenure and promotion decisions. In striking contrast, in another polling question, 90% of the respondents said it should play such a role.

Table 4 reveals participants did not place a lot of value on any one category of publicly presenting the results of pedagogical research or pedagogical best practices. Lesson plans seemed of least importance; indeed, the concept seemed alien to some. It is interesting that the production of videos isn't more valued given that the flipped classroom approach (where students often watch videos) has been widely embraced by our K–12 colleagues; this enthusiasm has not percolated into higher educa-

TABLE 2

Responses to the question, "What impact would the publication of teaching materials have on promotion and tenure decisions?" Data are for U.S. high schools.

	Essential	Important	Nice to have	Irrelevant	Negative impact
Classroom activities in peer-reviewed journals (e.g., lab exercises)	4.80%	14.52%	42.04%	38.17%	0.47%
Contributing to a textbook or other published book used for educational purposes	2.00%	11.31%	44.17%	41.93%	0.59%
Lesson plans	20.12%	21.05%	29.59%	29.01%	0.23%
Peer-reviewed case studies	2.92%	9.24%	38.48%	48.65%	0.70%
Peer-reviewed videos	1.53%	8.49%	39.27%	49.88%	0.83%
Poster presentations at pedagogical conferences	1.65%	7.64%	41.83%	48.18%	0.71%
Report of the effectiveness of pedagogical innovations	7.07%	19.79%	37.81%	35.10%	0.24%
Report on pedagogical research results	3.41%	13.76%	40.24%	42.24%	0.35%

tion. Case study teaching has made inroads, whether by virtue of the problem-based learning movement or because of the long history of case study teaching. We see this when we look at the results of the follow-up question, "What impact would having a case study published by the NCCSTS have on your promotion or tenure?" Almost 80% of the teachers say it would carry some weight. (Recall that the folks taking the poll are NCCSTS members. No doubt this puts a positive spin on the answers.) Faculty were less enthusiastic about the merit accorded a reviewer of case studies: 70% responded that it would receive positive consideration, and 30% said it would not.

Turning to how the survey participants thought their institution approached the question of scholarship in teaching, 50% said they knew of no policy and another 35% said the schools left it in the hands of the department. Only 15% said there was an explicit policy in place. We might conclude that if scholarship in teaching is not valued for tenure and promotion, it seems by unspoken tradition rather than a clear policy. In contrast, most universities do have clear policy statements about the strong expectations for research, and its importance in tenure and promotion decisions.

Last, we come to who makes the decisions. Recall the question asks, "Describe the primary responsibility of the people who are doing the performance evaluations of instructors for promotion and tenure." Only 15% of the respondents said they couldn't give a simple answer and described why. Most explained they were at an

TABLE 3

Responses to the question, "How do you believe the following are valued at your institution for tenure and promotion decisions?" Data are for U.S. universities.

	Essential	Important	Nice to have	Irrelevant	Negative impact
Scholarship (research) in your STEM discipline with publication of results	58.94%	22.63%	15.33%	2.92%	0.18%
Teaching in your STEM discipline	61.36%	26.01%	8.79%	3.66%	0.18%
Scholarship in teaching and publication of results	16.88%	21.83%	48.26%	12.48%	0.55%
Service both within institution and externally	36.45%	38.83%	20.15%	4.03%	0.55%

TABLE 4

Responses to the question, "What impact would the publication of teaching materials have on promotion and tenure decisions?" Data are for U.S. universities.

	Essential	Important	Nice to have	Irrelevant	Negative impact
Classroom activities in peer-reviewed journals (e.g., lab exercises)	7.04%	29.07%	47.59%	15.93%	0.37%
Contributing to a textbook or other published book used for educational purposes	5.95%	35.32%	49.44%	8.74%	0.56%
Lesson plans	1.86%	7.99%	30.30%	59.11%	0.74%
Peer-reviewed case studies	7.42%	26.16%	49.54%	16.51%	0.37%
Peer-reviewed videos	2.43%	12.73%	44.19%	40.07%	0.56%
Poster presentations at pedagogical conferences	6.10%	26.06%	48.43%	19.22%	0.18%
Report of the effectiveness of pedagogical innovations	5.22%	28.92%	48.88%	16.79%	0.19%
Report on pedagogical research results	7.62%	28.44%	48.14%	15.61%	0.19%

institution where several people had a hand in the verdict, including the department faculty, chair, dean, provost, interdisciplinary committee, and president—any one of whom could put the kibosh on a hapless candidate's bid for tenure and/or promotion. Perhaps surprisingly for a university, we learn that 43% of the respondents said that teaching was the prime responsibility for the individuals making the decisions. A lesser role was given to research faculty (25%), and little input allotted to administrators (18%). This result is a far cry from the results of the K–12 and community college institutions where apparently administrators rule the roost.

What should we make out of this? One take-away message might be: A large number of individuals do not like the current system where scholarship in teaching receives little credit. A reasonable conclusion might be: If you don't like the results, work to change the system. Supposedly, we faculty are in charge, aren't we? ■

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