

SCHOLARSHIP RECONSIDERED -- A REALITY CHECK

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Abstract

Scholarship in the American academy has traditionally been taken to mean the faculty's activity directed toward increasing the body of knowledge in their disciplines. In a seminal report, Ernest Boyer proposed a broader model in which scholarship comprises four activities: discovery, application, integration, and teaching. Adoption of this model has been slow. This paper describes Boyer's model, analyzes a system for bringing about change through the application of rewards, identifies flaws in the system that would impede implementation of the new model of scholarship, and proposes actions to correct those flaws.

Introduction

Ever since the rise of the American research university, faculty have been debating the relative value of teaching and research and arguing that one or the other is not being sufficiently rewarded. Individual faculty members have found themselves labeled teacher or researcher and a myth has emerged which holds that faculty can be one or the other but not both. Indeed, experience has shown that it is not easy to do both simultaneously, since either can consume all of one's time and energy.

While this debate has been often heated and occasionally acrimonious, there was a vague feeling among many academics that there must be a more coherent model of the professor; one that would accommodate the various talents and propensities that are found among such a diverse group of people. In 1990, Ernest Boyer (1) provided such a model by revisiting the whole idea of scholarship and proposing a new way of looking at what is expected of a member of the professoriate. This model was met with great enthusiasm in many quarters and a number of initiatives have emerged to use Boyer's work to effect reforms in the academy.

It is an understatement to say that change comes slowly to a university. This particular change -- adopting a model of what might be called a new renaissance professor -- is coming slower than most and may never be fully realized in the form Boyer envisioned. This paper will briefly describe the Boyer model, analyze the mechanism of changing the professoriate, describe some difficulties with this mechanism and, finally, propose some possible means of alleviating those difficulties.

The Boyer Model

or
The New Renaissance Professor

The central idea of *Scholarship Reconsidered* is to move away from the one dimensionality that has too often characterized the careers of members of the faculty. Boyer asserts that the scholarly task of the professor should involve four facets: discovery, integration, application, and teaching.

Discovery is closely related to what we have traditionally referred to as research. It is the process of adding to the knowledge base of the professors discipline. As correctly noted by Boyer, this facet of a professors activity has dominated the professorial model in many institutions for the past several decades.

Integration is the process of relating the discoveries in ones own discipline to the greater body of knowledge. It is generally accepted that as knowledge has increased, each individual is master of a smaller fraction of that knowledge and there has been a general tendency for separation, rather than integration of what we know. Boyer suggests that a very useful aspect of scholarship would be the activity of putting in perspective some of the knowledge that we have gained.

Application is the actual use of our knowledge to the benefit of society. Boyer observes that too often our knowledge product is considered academic and effete, lacking any relationship to what we have come to call the Real World. Most engineers would probably join in this criticism of our colleagues in the arts and humanities. A good case may be made, however, that some engineering research is of little practical value and has no relation to actual practice, either current or expected.

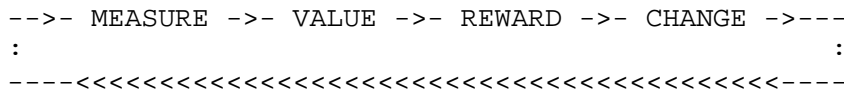
Teaching is, of course, the process of effecting the transfer of knowledge to students, broadly defined. Boyer considers more than the narrow process of teaching, however, and insists that good teaching involve appropriate content as well as effective methods.

With this background, Boyer asserts that our colleges and universities have not encouraged, nor have our faculties adopted, a system where a professor may, with uniform reward and dignity, participate in all of these facets of scholarship. Rather, faculty concentrate on research to the neglect of teaching or concentrate on teaching to the neglect of research. Administrations reward research more than teaching while paying lip service to the latter. A broader, more integrated approach is needed. Boyer proposes a concept of a new renaissance scholar (this writers term) who is involved in all four facets of scholarship but

to different degrees at different times in the individuals career.

Achieving The Boyer Ideal

If one subscribes to Skinners theory of behavior, the key to effecting change is the judicious application of rewards. A very simple model of reward-induced change is presented in the following figure.



The first step in the process is to MEASURE the activity or behavior that is to be modified. In the case of faculty, it would be necessary to measure or evaluate, for every faculty member, performance in each of the four facets of scholarship.

The second step is to VALUE the behavior that has been measured. Some decision maker, hierarchical or collective, must compare the measured performance to the performance that is desired. It is the definition of desired performance that requires a value judgment on the part of that decision making structure.

Next, it is necessary to REWARD, in some way, those individuals who are achieving or making progress toward the desired goals. Obviously, rewards need not be monetary, but it is not likely that non-monetary rewards will satisfy some if others are receiving cold cash. It has been said that researchers get raises and teachers get awards. That will never do.

Finally, of course, the individual must CHANGE. This requires that the reward be perceived in a positive manner and that there be faith in the long-term consistency of the system. If the individual thinks that next year the standards of performance will be different, there is no incentive to try to anticipate what one should do to please the system.

Most people (but certainly not all) will probably agree that this system works. Indeed, it is just this cycle that is blamed for getting us to the current situation that so many people feel needs to be changed. So what are the elements at work in the system that hinder progress toward the Boyer ideal?

Reality Check -- Gaps in the Cycle

In each step of the simple model of reward-induced change in the academy, there are realities that interrupt the reinforcement cycle.

Evaluation.

The first problem is that we do not have effective systems for evaluating academic performance. No one is satisfied with counting publications to evaluate research quality. Very few believe that student evaluations of teaching are, by themselves, adequate for assessing the effectiveness of teaching. Has anyone ever really tried to evaluate critically the scholarship of application and integration? Without a thorough, comprehensive system of evaluating performance, no reward-based system can be deemed credible.

The second problem is that faculties, as a whole, resist evaluation. There have been endless debates over whether student evaluation of teaching should be mandatory and, more often than not, the collective answer is no. There are several reasons for the faculties concern. There is, first, recognition of the fallibility of the current systems as noted above. One hopes that this can be corrected. A greater problem, however, is the feeling that someone will use the results of the evaluation to beat up on me." This is difficult to deal with because if we are to use rewards to change behavior, someone is going to get beat up on even if that only means getting a less than average raise. If good performance is to be recognized, less than good performance will have to be recognized as well.

Finally, it is widely held that it is difficult, if not impossible, to have a single system of evaluation that serves both formative and summative roles. Few doubt that we need effective systems to improve teaching at the technical level. Can we design a system that does that and is still effective in determining rewards, or will it be necessary to have two different but parallel systems?

Value

If new renaissance scholars are to be created, it is imperative that they be valued. It is not clear that universities, either administration or faculty, do value the kind of scholar that Boyer defines. Part of this is purely fiscal. Many universities have come to depend upon research dollars to maintain their programs. Faculty have learned to enjoy the lifestyle that comes with grants - graduate students, equipment for laboratories, travel funds, and even, in some cases, reduced teaching loads. The administration of a university and most of the faculty must be in agreement that it is in their best interest to adopt the Boyer ideal or it will never work.

It would appear that not all of the general public, i.e., the parents of prospective students and the prospective employers of our graduates, value the new renaissance professor, either. This was expressed quite eloquently by Richard Huber(2). The market value of a degree is increased, not by an improvement in the education of undergraduates, but by the faculty's enhanced reputation for research. If this is true and if there is little or no correlation between research quality and instructional quality -- a point hotly debated -- the public does not really value the model that Boyer proposes.

Rewards

Insofar as rewards are related to monetary resources, the reward system is constricted by the availability of funds. Salary increases, a very tangible and eloquent reward, have not been forthcoming in all universities in recent years and it appears that fiscal constraints will be with us for some years to come. Other rewards such as travel funds, computers, laboratory equipment, and student assistants are also dollar driven. Of course not all rewards require money, but money does help.

A characteristic of a Skinnerian reward system is that the rewards must be differential; that is, they must differentiate between good performance and poor performance. In many institutions today, salary increases and some other benefits are primarily spread across the board." This may be due to a board of trustees that is overzealous in its egalitarianism, but it is more likely due to the actions of a faculty union. Unionization has brought some genuine benefits for the faculty but negotiated salary scales and across-the-board pay increases will hamper any reward system that is being used to bring about change.

Change

It is human nature that when someone recommends change they are usually recommending changes in OTHER people. Administrators want the faculty to change. Faculty want the administrators to change. It is clear, however, that if progress is to be made toward the Boyer model, change will be required of everyone.

In summary, then, there are many gaps in the change-inducing cycle of our universities. We are an optimistic people, however, and always believe that faults can be corrected.

Toward a Cure

There are several things that can be done to address the problems described above. None will be easy. None will be

accomplished in a short time. All are possible, at least in engineering. Here are my recommendations:

Establish an evaluation system. I consider this the most important ingredient in implementing the new renaissance scholar model. The FACULTY must INSIST on a thorough evaluation system that assesses the performance of EVERY faculty member in each of the four areas of scholarship. No president or provost or dean can establish such a system without the agreement and cooperation of the faculty. A system might involve evaluation by an administrator or an outside expert but, in my opinion, it must also include peer evaluation. Granted, this is fraught with all the dangers born of human frailty -- professional jealousy, slipshod work, unmet schedules -- but the faculty must take responsibility for its own performance.

Solve the summative-formative problem. Can a single system be used for both determining rewards and effecting improvements in the evaluatee? There are those who say no and those who say yes. I believe that this argument will stall any attempt to establish a meaningful system. Here is a fertile field that, if successfully tilled, will move us forward significantly. We can decide on a single system or two separate systems, but a decision must be made.

Clarify institutional values. Boyer and many others have decried the tendency in the last few decades for most of our institutions to look alike. It is time for boards of governors and university administrators to lead their institutions to develop their own unique vision of how they want to be known in, say, twenty years. This will give guidance in hiring, in faculty activities, in the allocation of resources, and, finally, in the assignment of rewards. One result of this delineation of values should be a clear communication to the faculty of how much emphasis should be placed on each of the four facets of scholarship.

Administrators must be true to the vision. Deans, department heads, and others who make reward decisions must be consistent. They cannot tell faculty to improve their teaching and then reward only research. They cannot espouse application and then give equal raises to everyone just to avoid hard feelings in the department. Rewards must be based on an honest and effective evaluation and an objective comparison to the institutions vision. This does not mean the blind application of a point system or allocation of rewards by committee. There must still be room for a little windage, a hunch that someone will do better next year, and the exercise of human judgment that only an individual can provide.

Administrators, especially department heads, must be trained in faculty development and must take responsibility for

guiding and supporting faculty as they move through their careers. Boyer envisions a scholar moving among the various facets of scholarship, emphasizing one for a few years and then moving on to another. This cannot happen easily without considerable guidance and without an advocate who shares in and supports the career decisions. It is also essential that the faculty receive frequent feedback in order to improve their performance. Again, the department head is in the best position to provide this information.

Restrictions on merit pay must be relaxed. Whatever the source of the requirement that salary increases be administered across the board, those policies need to be changed. If it is a board of governors policy, this can happen. If it is a result of collective bargaining, I am less optimistic. The leaders of faculty unions should, however, open the question of merit pay to determine what is really in the best long term interest of their members. Perhaps if the merit system was coupled with a good system of evaluation, most faculty union members would be willing to change. Its worth asking.

Administrators must be more creative with rewards. Too many administrators never get beyond salary when designing a reward system. There are other things: awards, travel funds, office furniture, a better office, a new carpet, some laboratory equipment, lunch with the dean, an attentive ear when the faculty member is talking about their teaching or their research. A lot of money might make it easier to give rewards but it is not essential.

Faculty must be ready to change. I am sure there are faculty of every kind -- researchers, teachers, appliciers, and probably even some integrators -- who see the proposed system changes as resulting in providing greater rewards for them as they continue to do what they do. Thats not what Boyer said. Boyer painted a picture of a scholar who, at various seasons, made contributions in all four areas. A researcher might be told that she is weak in applications and a teacher might be told that he is weak in research. For this to work, faculty must move with the rhythm of their careers and be willing to change, if necessary, to enhance their own performance and their contributions to their institutions.

Conclusion

Boyers book has created a great deal of discussion and more than a little action on the campuses of America. Generally, however, change has been very slow and it remains to be seen if it is permanent. The model he proposes is so attractive, though, that many people want to see it become general in its adoption. Perhaps this analysis will help hasten the

process.

Epilogue

On the other hand, Skinner might have been wrong. There are those (3) who say that rewards not only do not help mold behavior, they are counterproductive. In this non-Skinnerian model, people do the right thing because they want to and are self-actualized to do so. I don't know. In their natural state people might indeed do what is best for the greater good and be productive because they want to be. I want to believe that they would. But we are not in our natural state and I believe that rewards, broadly defined, will be needed to achieve change. I know of teachers who love teaching and who are self-actuated but who still bridle at what they consider to be the inequities in the reward system. Until I achieve some new enlightenment, I will continue to believe in the efficacy of the change cycle described above.

A final comment. In this paper, I have adopted the position that every faculty member can approximate the ideal of the new renaissance professor and a reader could infer that I believe none exist today. That is not true. We all know individuals who are great researchers and brilliant teachers, are sought after to solve industrial problems, and have great insight into the relation of their discipline to the whole. It is precisely the fact of their existence that makes me believe that we lesser mortals can at least approximate their achievement.

Acknowledgments

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