

*Much teamwork already occurs within colleges and universities. But why isn't there more teamwork utilizing the special expertise our institutions have for solving major issues confronting higher education and society? Several impediments are discussed, including faculty autonomy, discipline boundaries, evaluations, and dysfunctional reward systems. Encouraging more teamwork requires innovative changes in institutional policies. The focus in this paper is on changing incentives and the reward system so as to provide explicit incentives for teamwork.*

# Teamwork In Higher Education:

## *Why Don't We Have More Of It ?*

Teams can be defined in many ways, emphasizing factors such as: authority/responsibility relationships; groups where more can be accomplished by working together rather than independently; groups that are valuable because of the diversity of information they bring together; and simply groups whose productive inputs are related. Within this framework, I loosely define university teams as groups of two or more faculty members interacting to "produce" the university's array of products and services.

It is obvious that each institution is itself a team, as are the colleges, departments, and other units within it. Further, informal teams abound within our institutions, from individual faculty collaboration within and between departments, to departmental and college collaboration, to collaboration among institutions as well as their external communities. Research teams, co-authored articles, and team teaching in individual courses are common. There also is teamwork on internal service assignments and on many outreach projects. In short, much teamwork already occurs, especially mutually beneficial collaborations by small faculty teams.

But why isn't there more teamwork utilizing the special expertise our institutions have for solving major issues confronting higher education and society? What are the obstacles, and can they be eliminated without seriously damaging essential characteristics of academic institutions? How can teamwork be encouraged by modifying the system of incentives and rewards?

### **Institutional Features that Affect Teamwork**

#### ***Faculty Autonomy***

The great strength of our institutions of higher education derives primarily from the talents of its individual fac-

ulty and how effectively those talents are used. Substantial faculty autonomy is a natural consequence of the creative nature of universities. Creativity thrives with independence and withers under a centrally directed bureaucratic hierarchy. Typically, faculty probably have been hired more for their individual expertise than for their "team" expertise. In fact, universities consist of a very large number of highly specialized experts. The tenure system protects the creative independence of faculty in pursuing intellectual truth. Individuality is further emphasized by the "star" system that encourages and rewards the highest level of individual achievement. More generally, evaluations, tenure, and promotion policies and procedures commonly emphasize individual achievement rather than group achievements or cooperative behavior. It can be difficult to induce major cooperation and teamwork within a system that values individual faculty and unit achievement more than broader teamwork, especially given other factors that reinforce the tendency to act independently. Furthermore, faculty, departments, and colleges tend to have much more independence, authority, and ability to affect both strategic decisions and operational decisions than is typical for workers, departments, and divisions in private firms. The diffuse control hierarchy likely impedes cooperation and teamwork simply because individual faculty may perceive that conflicting signals make it easy to pursue their own agendas rather than working on teams, especially if teams cut across various chains of authority that do not agree on goals.

### *Discipline Boundaries and Departmental Teamwork Bias*

Most institutions are organized into operational units that each include only one or few knowledge disciplines. In most cases, disciplines have long histories, national or international associations, and effective communication among members. Most faculty are trained in specific disciplines, regularly interact with others in the discipline, and have strong allegiances to their disciplines. Because of faculty training, discipline allegiances and the operation of national (discipline-based) markets, many faculty are very likely to be responsive to these discipline pressures, even when they lead to behavior that conflicts with institutional goals.

There are other factors that reinforce departmental allegiance and tend to make teamwork more likely within than across departments. Many faculty members probably feel much greater peer pressure from members of their own departments *and* disciplines than they do from other members of the university community. Because department members know that their career prospects may be affected not just by their own efforts but by the perceived quality of their departments, there clearly are stronger incentives for mutual monitoring within departments than in larger units above the department level.

In most institutions, "cohesiveness" and "trust" probably are more likely in (smaller) departmental units than in (larger) colleges or the university as a whole, making the departments more effective than larger units in inducing effort and reducing free-riding because team members trust that their colleagues are also working hard. In short, teamwork is more likely for departmental purposes than for large university projects that cross discipline boundaries, unless the discipline itself values the activity. Since solutions to many of society's most pressing issues -- e.g., the K-12 system, health care, and global competitiveness -- require teamwork among many disciplines, departmental teamwork biases undoubtedly impede effective university teamwork on those and other problems.

### ***National and International Markets***

The market for faculty is national and even international in scope. Consequently, recruitment of the best faculty necessarily involves competing against other institutions in these broad markets. The interactions of hundreds of institutions and thousands of individual faculty members result in setting minimums on compensation and working conditions that institutions must meet if they wish to compete for the best faculty. Because national mobility depends largely on one's research/creative ability and accomplishments, many faculty with high aspirations obviously are reluctant to emphasize teamwork for institutional goals at the expense of their own research productivity. This tendency is strongly reinforced when dysfunctional institutional reward systems do not value and reward important institutional teamwork.

### ***Complex Goals and Success Measures***

Institutions of higher education have inherently complex missions. Undergraduate and graduate education differ substantially, as does the educational process among different fields. Service and outreach are important goals that entail yet different demands on the academy. Research and creative activity are major goals that complement or sometimes conflict with the above goals. There is no easy way to condense such complex missions into one or even a few simple success measures to guide institutions along their paths.

The lack of simple, focused success measures probably affects teamwork in institutions of higher education. Without common agreement on the most important goals and ways of measuring success in achieving those goals, it probably is more difficult than in private firms to get all team members effectively working together. Although many business firms also have complex operations, they rely on the "bottom line" to evaluate their overall success and the success of various projects or units within the firm. This provides a very focused way of evaluating the "success" of various activities within profit-making firms. But there is no comparable "bottom line" for institutions of higher education that have necessarily complex missions. A related problem is that universities tend to change goals and priorities when their leaders change, often creating confusion among faculty. Leaders may come and go in the private sector, but the profit goal does not. Presidents of national disciplinary associations may come and go, but the focus on research does not.

### ***Administrative Obstacles***

The organization and bureaucratic rules of many institutions also may impede teamwork. Interdepartmental efforts within the same college may involve different chairs (and cultures) as well as the college administrative structure, which may involve assistant and/or associate deans as well as the dean. Involving faculty from different colleges further raises the administrative barriers and multiplies complex bureaucratic rules. Faculty confronted with such a large number of administrators and rules may be reluctant to join major team efforts.

### ***Monitoring and Evaluation Systems***

It is difficult to establish effective monitoring and evaluation systems for professionals with complex jobs. The need for discipline experts to evaluate contributions and the discipline-based structure of most institutions partly explain why evalu-

ation efforts usually are carried out mainly at the department level. They usually rely heavily on department peers for annual reviews and often include outside discipline peers for evaluations of promotion and tenure. Department and discipline members usually have the most information, knowledge and expertise for evaluating others in their own department. But this also means that faculty are more likely to respond to departmental pressures, perceptions, and goals than to broader college or university goals that conflict with departmental goals.

### *Dysfunctional Reward Systems*

Effective reward systems that stimulate faculty productivity in terms of the whole range of institutional goals are especially important in a complex setting such as a university because faculty abilities and willingness to work are imperfectly known and difficult to monitor. But institutional reward systems very often are poorly tailored in terms of institutional goals. Most faculty probably agree that we have a better basis for evaluating research contributions than individual and especially team contributions to teaching and service, or to teaching, integration, and application. The result is a natural tendency to focus on evaluating and rewarding research contributions, and this tendency is reinforced by other factors discussed in this paper. Faculty are difficult to fool so they are more likely to respond to the reward system than to the rhetoric. Faculty know that their "home disciplines," national peers, and the national market value research. Consequently, attempting to get faculty to contribute on teams working on important institutional goals is not likely to be successful unless such contributions are rewarded by the institution. Fortunately, as discussed in the next section, the momentum for change clearly is building.

### *Encouraging More Teamwork*

Encouraging more teamwork involves overcoming the types of obstacles discussed in the prior section. Some of these features also represent a great strength of our institutions of higher education and others are likely to change only slowly. Thus, the issue is not how to eliminate all of the features discussed in the prior section. Rather, the question is whether institutional policies can be modified to encourage more teamwork without seriously damaging features that also represent strengths.

Most of the obstacles to teamwork discussed in the prior section are likely to continue, or diminish only slowly. Emphasis on faculty autonomy will remain strong. Discipline boundaries will not change rapidly, although there already is considerable work underway by several discipline associations, as indicated in the recent book by Robert M. Diamond and Bronwyn E. Adam (1993). Similarly, it appears likely that the dominance of research/creative activity in the external market will probably diminish only slowly and only in response to changes in hiring criteria by a large number of institutions. The only obstacle that might be changed with relatively little cost could be various types of administrative rules that impede teamwork. Thus it still appears that increasing the value placed on teamwork at the departmental and disciplinary level in evaluations, tenure, and promotion criteria is likely to be a slow process.

Even removing the other obstacles discussed in the prior section would not make a dramatic difference without institutional reward systems that value teamwork in contributing to important institutional goals. Providing incentives for team-

work and changing the reward system are fundamental requirements for encouraging teamwork. The focus on rewards and incentives does not deny that non-monetary considerations, such as stimulating work, colleagues, and students, are a major factor in attracting many or even most who choose a career in higher education. Nor does it deny that faculty exhibit substantial altruism in some of their behavior. In fact, the more that altruism or internal motivations guide behavior, the lower the costs of getting teams functioning effectively to accomplish institutional goals.

The reward system encompasses tenure and promotion decisions, work assignments, and resource allocations (e.g., computer support and travel funds) in addition to salary and benefits. Total compensation includes other non-monetary benefits (or costs) of employment in higher education, such as stimulating colleagues and students. Thus, teamwork can be encouraged by making team contributions more valuable in terms of any or all aspects of total faculty compensation, and substantial work already is underway to reassess institutional priorities, faculty assessment systems and faculty reward systems.

The American Association for Higher Education is taking a major role as a change agent, partly through its first two annual Conferences on Faculty Roles and Rewards. Diamond and Adam include several interesting possibilities for change. Ernest Boyer and the Carnegie Foundation for the Advancement of Teaching are undertaking a major project that includes a forthcoming study of assessing faculty scholarship broadly, particularly including contributions to teaching, integration, and application. Numerous projects are underway in various institutions.

Clearly, the momentum is building for major changes to value and reward all aspects of scholarship, including teamwork contributions to major institutional goals. Success in these endeavors no doubt will be difficult, but it will be essential for effectively directing faculty energy into important institutional goals that involve major team efforts. Within this broad array of changes that ultimately may improve teamwork, I focus on the following possibilities: rewarding teamwork in internal markets; valuing teamwork in tenure and promotion decisions; explicit team incentives; incentive budgeting; flexible workload assignments; and multidisciplinary initiatives.

### *Rewarding Teamwork in Internal Markets*

Attempting to create rational internal reward systems confronts several problems, especially at universities that emphasize research along with other priorities. Given the value placed on research by disciplines and the external market, perhaps it is not surprising that many institutions have been unsuccessful in developing effective internal compensation systems that match the rhetoric of their complex goals and priorities. Clearly, strong leadership is required to develop appropriate reward systems that value faculty contributions to institutional missions, including the teamwork that is essential for achieving many goals.

Institutions are constrained by external market forces in devising reward systems that value important contributions to institutional goals, including teamwork. For example, universities must respect and respond to the national/international market for faculty, if they wish to attract and retain the best faculty. Different disciplines obviously have different market values, and this necessarily results in different minimum salary levels required to retain faculty of "comparable quality" in different disciplines. Universities cannot ignore these simple market facts in setting minimum pay scales for various disciplines, since these minimums are determined by market

forces that are completely outside of the control of, and unaffected by, any one institution.

The fact that external market forces determine *minimum* salaries for attracting and retaining faculty in various disciplines does not prevent universities from devising internal markets that are somewhat insulated from external market forces, subject only to the minimums set by external markets. In fact, almost all large organizations have "internal markets" for promoting and rewarding employees. Detailed models have been developed to explain why profit-maximizing organizations "over-pay" employees, relative to their external market value. Ronald G. Ehrenberg and Robert S. Smith provide a good summary of pertinent economic models in Chapters 5 and 11 of their recent book *Modern Labor Economics* (1993). In fact, an explicit goal of many profit-maximizing organizations is to encourage employees to invest in "institution-specific human capital," which makes the employee more productive for the organization than for the external market because of enhanced productivity due to specific knowledge and skills valued by the organization but not the external market. Both the firm and the worker can benefit from such arrangements. But these arrangements endure only because they are mutually beneficial to workers as well as firms, and that requires organizations to compensate workers who provide services that are more valuable for the organization than for the external market. For example, many faculty will not contribute effectively and indefinitely to (more?) teamwork that is valuable to the institution but not the external market, unless their contributions are valued and rewarded by the institution.

The above considerations have implications for effective compensation systems. First, minimum salaries are dictated largely by external market forces that are completely beyond the control of any one university. Second, universities can and should compensate faculty above these minimums for contributions valued by the institution but not necessarily by the external market. Third, compensation for institution-specific goals and priorities, including teamwork, is required to induce substantial and meaningful faculty contributions over the long term. Failure to reward faculty for organizational goals through a rational internal market eventually results in the departure of externally mobile faculty and disaffection of those who mistakenly invest in institutional goals that have neither external value nor internal rewards. It probably is debatable whether institutions are harmed more by the external or internal "departures" in these situations.

### *Valuing Teamwork in Tenure and Promotion Decisions*

Tenure and promotion are key features of the faculty reward system. These decisions are importantly affected by the views of one's department peers, and discipline cultures appear to change only slowly. However, institutions can encourage teamwork by including more weight on effective teamwork in contributing to important institutional goals. But this is not likely unless administrators are serious about encouraging teamwork, and credible ways of measuring team contributions can be developed. However, as discussed more explicitly above for salary and other compensation elements, the external market constrains institutional flexibility to some extent. Obviously, the focus cannot be only on team contributions (to the exclusion of individual research, for example) unless institutions are willing to lose the most mobile faculty to other institutions.

### *Explicit Incentives for Teamwork*

Explicit incentives for effective teamwork can be provided in a variety of ways. For example, effective teamwork is required for improving many “internal” dimensions of institutional performance, including the curriculum as well as student retention and graduation rates. Similarly, effective teamwork is required for improving many pressing “external” problems, including health care, global competitiveness, economic development, the K-12 system, the global environment, and urban crises. Institutions of higher education have much to contribute in solving these problems, but institutions often have been slow to provide real incentives for solving even their own internal problems, such as graduation rates, let alone pressing external problems. The necessary expertise to contribute effectively to solving many of these problems usually can be found among or even within individual institutions, but that expertise must be harnessed through effective teamwork. Clearly, such teamwork is possible, as proven by the research teams that collaborate in securing and conducting major external grants. But institutional incentives are lacking for teamwork in solving major internal and external problems.

Institutional awards or grants could be provided for both cooperation within teams and healthy competition among teams in solving major internal problems, such as retention and graduation rates. Standard committee assignments are the norm for dealing with these internal problems. But institutions might get more effective results by providing some major incentives for faculty, students, and staff to collaborate in solving such internal problems. For example, major (institutional) grants to encourage several teams to submit proposals might be used, as is done in the external research market. Then, the best few proposals might be selected for funding. Healthy competition among various approaches might surface innovative and effective solutions. Incentives and rewards to encourage effective teamwork might consist of summer grants, support funds, salary supplements and bonuses, or flexible workload assignments, as discussed in the next section.

A similar model could be used to encourage effective teamwork in solving pressing community problems. In addressing external issues, institutional incentives could be combined with external funding and support to encourage contributions by higher education teams. Most institutions have substantial strength for contributing to solutions of selected problems, and this strength might be combined across institutions and/or with the external community. But institutions tend to respond only passively when outside agencies solicit proposals rather than proactively by themselves developing, funding, and implementing their own proposals.

Incentive budgeting obviously is related to the incentives discussed above and also can be used to reward units and teams that contribute effectively. This can be done by incorporating some explicit team rewards in the budgeting process. However, such incentives have to be carefully devised to guard against undesirable and unintended side effects. For example, budgeting that uses only student credit hour (SCH) generation encourages quantity over quality, and budgeting that ignores SCH generation encourages units to serve fewer students. As another example, budgeting that rewards departments only for high graduation rates encourages them to select few, high quality majors. Any budgeting scheme usually has some unintended effects, so the possibility of adverse side effects should not preclude using budget incentives. Rather, caution must be used in selecting incentives for important teamwork contributions after carefully analyzing both the intended and unintended consequences. But appropriate budget incentives could be important in affecting the decisions colleges, departments, and faculty make.

### *Flexible Workload Assignments*

Flexible workload assignments could be used to supplement the explicit incentives for teamwork discussed above. Workloads across faculty probably are more uniform than is optimal for maximum productivity within many institutions. Because the comparative advantages of faculty differ, assigning larger classroom loads to some especially effective classroom teachers and smaller ones to others who contribute more effectively to other goals could increase total productivity, assuming each group is appropriately rewarded. The pressing problems universities and society face require major efforts for effective solutions, and more flexible assignments might make it feasible to have selected teams of faculty devoting much or even most of their energy and effort to solving some of these problems. For example, more learning and success might occur if some faculty teams did much less classroom teaching and instead did much more work on developing and implementing innovative solutions for improving student retention, learning, and graduation. Many experts within the university also can contribute to improving the operation of other units within the university. Many institutions might take more advantage of their internal expertise by using experts in one unit as "internal consultants" for assisting other units, and some institutions already are using such arrangements. Similarly, selected teams of faculty could be assigned to devote a large proportion of their time to solving pressing social issues in their areas of expertise. Effective contributions to many of these internal and external issues probably require appropriate rewards within the internal market as well as flexible workload assignments.

### *Multidisciplinary Initiatives*

One interesting experiment in encouraging cooperation and teamwork is just beginning at my own institution. Arizona State University now has developed a proposal for encouraging "Multidisciplinary Initiatives." An early draft of the proposal explains some of the reasoning as follows:

...many of the most exciting academic and societal challenges lie at the intersection of two or more disciplines. Accordingly, cooperation among multiple disciplines in strategically selected areas is of importance for the university and for society as a whole.

...many activities are valued within the university, but the creation of multidisciplinary initiatives is intended to emphasize a few extraordinarily promising areas that also are valued by key communities outside of Arizona State University. For example, activities that meet this test might include ones that may be important to our urban area (e.g., a more diverse set of graduates) or the national research agenda (e.g., developing environmentally safe materials) or the higher education community (e.g., producing more quality Ph.D.'s to replenish the national professoriate).

The above considerations suggest there may be an important role for university-level administration to play in creating incentives for multi-college cooperation in areas for which the university has (or might for strategic purposes develop) some notable strengths.

...the wise investment of modest amounts (relative to the total university budget) could make a major difference in more fully exploiting these multidisciplinary strengths and thereby contribute to solving important problems.

The first call for preliminary proposals resulted in 58 submissions involving

hundreds of faculty members. A faculty review committee recommended several for development into "full" proposals. These will be reviewed in fall 1994 to identify those that will be institutionally supported. Despite the numerous impediments to team work on multidisciplinary projects, the large response to this initiative provides convincing evidence that appropriate incentives can generate substantial faculty interest. It remains to be seen whether the process also will be successful in producing the substantial outcomes that now appear feasible on the basis of this promising start.

### *Conclusion*

Some impediments to teamwork also represent institutional strengths for other purposes, and these as well as other impediments may change only slowly. Innovative changes in institutional policies will be needed to encourage more teamwork, especially for the large projects involved in solving some major problems faced by our institutions and our society. Fortunately, the momentum for change is building, as partly shown by the AAHE Forum on Faculty Roles and Rewards. Because our institutions have so much expertise for solving major problems, it is important for this momentum to produce some effective approaches. Hopefully, the emphasis in this paper on incentives and rewards will be useful in considering how to devise feasible changes for encouraging teamwork that contributes to the solutions of some major challenges.

**Note:** This article is excerpted from an essay commissioned by the American Association for Higher Education for its second National Meeting on Faculty Roles and Rewards, held in New Orleans in January 1984. I thank Clara Lovett for suggesting this topic and for comments on an earlier version. I also thank my colleagues at Arizona State University for stimulating discussions about some teamwork issues at our August, 1993 University Retreat for Academic Chairs and Directors. Especially helpful was the summary of those discussions prepared by Peter Crouch and Jane Maienschein.

### *Suggested Reading*

Diamond, Robert M. and Bronwyn E. Adam. 1993. *Recognizing Faculty Work: Reward Systems for the Year 2000*. San Francisco: Jossey-Bass Publishers.

Ehrenberg, Ronald G. and Robert S. Smith. 1993. *Modern Labor Economics*. New York: Harper Collins (5th ed.).