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ABSTRACT

The development of an information system to help College of Education faculty at Florida State University campuses determine the criteria and procedures for awarding merit pay is described. Faculty groups need information that address both the objectives of individual faculty members and institutional goals. Data needed from the following five sources were examined: five-year salary history, faculty activity for current term, faculty assignment form, types of publications individual faculty completed over the previous five years; and the ranking of journals by faculty. Data collected on instruction and research from existing records from 22 programs, six departments, and for the college as a whole are summarized. Findings include: productivity appears unrelated to rewards; instructional and research productivity appear highly related; and the presence of active Ph.D. candidates appears unrelated to research productivity. Using the information system to identify the most productive programs can help direct both rewards and other resources to them. Institutional issues of faculty equity and motivation to maintain an academic culture are considered in light of a salary model. Conclusions are drawn about an information system to monitor faculty rewards. A salary increase form and faculty activity form are included. (SW)

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INFORMATION REQUIREMENTS FOR FACULTY  
MERIT PAY DECISIONS

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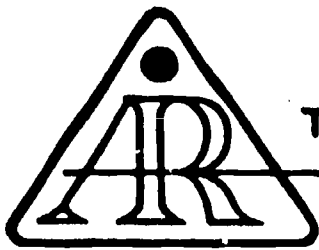
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Elizabeth F. Fox, Chair  
Forum Publications Editorial  
Advisory Committee

## ABSTRACT

Merit pay decisions for faculty members typically are made based on criteria established by administrators. One state university system has negotiated faculty-determined criteria as part of a new union contract. The information faculty groups need to establish these criteria must address both the objectives of individual faculty members and the institutional goals. This paper describes an information system which provides faculty members with data on assignments, productivity, and rewards for individuals. Institutional issues of faculty equity and motivation to maintain an academic culture are considered in light of a salary model. Conclusions are drawn about an information system to monitor faculty rewards.

## Introduction

Institutional researchers have always found themselves in an ambiguous role in institutions of higher education. They do research but are not members of the community of scholars. They study institutional problems but are not among the decision makers. They plan the use of resources but do not dispense, account, control or audit any funds. Within this role the institutional researcher must find ways to serve the missions of the institution without intruding into the operations which accomplish missions. The need for careful attention to this ambiguous role is never more critical than when the office of institutional research becomes involved in questions of criteria for faculty merit pay. Traditionally, the criteria are established by some central administrative process and then delegated to various administrative levels of colleges, schools and departments. Recently, the State University System of Florida entered into a collective bargaining agreement with the United Faculty of Florida in which the faculty members of each academic department were given the responsibility for establishing the criteria and the procedures for awarding merit pay within a

given academic department.

✓  
The purpose of this paper is to describe the information system developed to assist the College of Education Faculty at the Florida State University as they determined the criteria and procedures for awarding merit pay.

### Related Literature

The literature on faculty effort, productivity, evaluation and compensation has developed over the past several decades and reflects their economic and social conditions. The post war decades (Bunnell, 1960, and Stecklein 1974) reflect the conditions before major federal support was given to higher education. The faculty workload issues studied by institutional researchers centered around the need to explain to state legislators just what faculty members did all day long. Selected faculty members kept logs of their teaching, research and service activities. From these early studies came the activities for faculty assignments which remain today as a growing part of any faculty information system.

With the growth of higher education in both cost

and complexity, a need arose to study many facets of a large system. Computers became more available to central administration and sophisticated models were proposed to consider "marginal conditions for faculty choice" and the "professor's marginal utility" (Kirschling & Staaf, 1975, and Weathersby, 1971) while some of the techniques and programs were not readily accepted, the practice of not asking faculty directly for data but using central records remains.

The issues of collective bargaining have forced institutions of higher education to build and maintain better data bases on faculty members. Grievants ask questions about faculty members' productivity over time (Johnson, G.E., & Stafford, F.P., 1983, Hengstler 1982, Lewis 1979 and Jadamus, P., 1974). Salary data over time is now a regular component of the data base of institutions with collective bargaining agreements.

From this literature review it can be seen that faculty assignments, documented productivity and salary data over time need to be included as a part of any faculty evaluation data base.

## Method

### The Population

The departments used for this study are all 63 departments in the 14 colleges at the Florida State University. Each department faculty prepared a set of criteria and evaluation procedures which were evaluated for compliance with Board of Regents/United Faculty of Florida Agreements, State and Federal Law and the Florida Administrative Code.

### The Sample

After reviewing this population of departments, it was concluded that the College of Education departments presented a fair sample of the criteria and procedures faculty developed. Some departments required extensive historical data while others depended upon the subjective judgment of the department head or the Dean. This difference was apparent for both the departments in the College of Education and for the university departments.

### Data Collection

The data for this project came from the following five sources:

The five year salary history created for this



term, as the faculty members turn in their grade routers, the departmental secretary notes the number of student grades for each course for each faculty member. The graduate student advisees are updated at this time.

The Faculty Assignment Form. This form has been used for a number of years to assign a percentage of each faculty members' 9 month contract to the three activities of teaching, research and service. As changes occur in assignments (due principally to classes not offered due to low enrollment) the assignment forms are modified.

The Five Year Vitae. This form was prepared for a recent Board of Regents evaluation of the College of Education. The faculty publications were labeled by each faculty member as either scholarly, research, or creative and by general topic (learning and instruction, measurement, etc.).

The Ranking of Journals. The journals in which faculty reported publishing in the last five years were rated by a peer review panel to determine the outstanding publications for each faculty member.

project.

The faculty activity-current term (FACT Sheet)  
created for this project.

The faculty assignment form.

The five year vitae of each faculty member.

The ranking of journals by the faculty-created for  
this project.

### Salary History

Appendix G (see Figure 1) of the union contract is reproduced here to show the various categories in which faculty may receive a raise in salary under the terms of the contract. The category of "Other Discretionary Increases:" was the one of major interest for this project. When merit pay is negotiated it will be assigned to this category. There may be other discretionary funds which can be allocated using criteria and procedures other than those determined by the faculty members. The five year salary history created for this project used the "Other Discretionary Increases" category as merit pay. The unit used is "Half-Step" with an average value of \$400.

Faculty Activity-Current Term. The form was created for this project and is shown in Figure 2. Each

Figure 1

**APPENDIX G  
SALARY INCREASE NOTIFICATION  
1984-85**

In accordance with the 1984-85 negotiated Agreement between the Board of Regents and the United Faculty of Florida, your salary increase is:

Current (1983-84) Salary:	\$ _____
Statutory Required Equity Adjustment:	\$ _____
Developmental Research School Competitive Salary Adjustments:	\$ _____
General Salary Table Increase:	\$ _____
Promotion from _____ to _____	\$ _____
Top Quartile Increase:	\$ _____
Competitive Salary Adjustment:	\$ _____
Other Discretionary Increases:	\$ _____
Increase to Pay Grade Minimum:	\$ _____
Developmental Research School Supplement:	\$ _____
1984-85 Salary:	\$ _____

The recommendation for your salary increase was prepared by:

You may request a conference to discuss this increase.

Figure 2

FACULTY ACTIVITY - CURRENT TERM

NAME TERM

F.T.E.F.

\_\_\_\_\_ %

Assigned Inst. \_\_\_\_\_ % Research \_\_\_\_\_ % Service \_\_\_\_\_ %

Fixed Credit Courses

Prefix      Section      Credits      #Grades Given

Variable Credit Courses

Prefix      Section      Student Names & (Credits)

Major Professor for: Name (degree)

### Data Analysis

The data were collected from existing records and summarized for each of the 22 Programs, six Departments and for the College as a whole. In this process items of data were related to merit criteria. The final data summaries by Program appear in Table 1. Included are:

- (1) Total number of faculty assigned to the program
- (2) Number of faculty equivalent, assigned to INSTRUCTION
- (3) Student Credit Hours taught by regular faculty
- (4) Total PROGRAM Student Credit Hours generated
- (5) Number of ACTIVE Ph.D. candidates
- (6) Total in PROGRAM of Ph.D. candidates
- (7) Total number of GRADUATE STUDENTS in program
- (8) Number of articles published in TOP JOURNALS by program faculty in last 5 years
- (9) Number of articles published in ALL JOURNALS by program faculty in last 5 years
- (10) AVERAGE number of MERIT raises, in half-steps, obtained by program faculty in last 5 years

## Findings

The findings appear in Tables 1-3 and may be summarized as shown below.

- 1) The programs most in need of instructional resources based on the discrepancy between total program student credit hours generated (column 4) and the number covered by the line faculty (column 3) are program B, D, Q, & U.
- 2) The programs highest in both research productivity (column 8) and student credit hours generated (column 4) are D, K, L, & S.
- 3) The programs highest in both types of instructional productivity, total student credit hours (column 4) and number of active Ph.D. candidates (column 5) are O, Q, U, & K.
- 4) The only productivity measure that relates to merit raises is number of active Ph.D.'s. However, this may be an artifact based on those programs having both large numbers of active Ph.D. candidates and large merit raises being staffed by very senior faculty.
- 5) Programs that maximize instructional

Management Information on Instruction and Research

Across the College's 22 Programs

	<u>Fall Term 1984</u>					<u>5 Years</u>				
	(1) TOTAL	(2) INST	(3) SCH	(4) Program SCH	(5) Active Ph.D.	(6) Program Ph.D.	(7) GR.ST.	(8) TOP	(9) ALL	(10) Merit
A	5	3	800	300 <sup>H</sup>	0 <sup>L</sup>	0	28	4 <sup>H</sup>	11	6 <sup>L</sup>
B	4	3	800	2500 <sup>H</sup>	2 <sup>L</sup>	13	13	0 <sup>L</sup>	2	5 <sup>L</sup>
C	4	3	500	600 <sup>L</sup>	5 <sup>H</sup>	15	40	5 <sup>H</sup>	34	7 <sup>L</sup>
D	9	6	900	1600 <sup>H</sup>	1 <sup>L</sup>	5	45	12 <sup>H</sup>	40	5 <sup>L</sup>
E	2	1	200	200 <sup>L</sup>	0 <sup>L</sup>	0	2	2 <sup>L</sup>	4	5 <sup>L</sup>
F	5	3	400	400 <sup>L</sup>	13 <sup>H</sup>	33	102	0 <sup>L</sup>	5	6 <sup>L</sup>
G	2.5	1.5	300	300 <sup>L</sup>	1 <sup>L</sup>	7	20	1 <sup>L</sup>	15	7 <sup>L</sup> 1(.5)
H	7	4	700	800 <sup>H</sup>	6 <sup>H</sup>	14	24	1 <sup>L</sup>	16	3 <sup>H</sup>
I	2	1.5	200	200 <sup>L</sup>	1 <sup>L</sup>	5	13	0 <sup>L</sup>	4	12 <sup>H</sup>
J	6	3	500	700 <sup>H</sup>	1 <sup>L</sup>	18	26	24 <sup>H</sup>	39	8 <sup>H</sup>
K	7.5	4	900	900 <sup>H</sup>	6 <sup>H</sup>	23	53	19 <sup>H</sup>	48	8 <sup>H</sup> 1.(.5)
L	8	4	1100	1100 <sup>H</sup>	3 <sup>L</sup>	27	30	17 <sup>H</sup>	31	6 <sup>L</sup>
M	9	6	500	600 <sup>L</sup>	31 <sup>H</sup>	86	110	0 <sup>L</sup>	3	8 <sup>H</sup> 1(SAB) 2(.5)
N	4	3	300	300 <sup>L</sup>	20 <sup>H</sup>	45	56	0 <sup>L</sup>	3	7 <sup>L</sup> 1(SAB)
O	6	4	600	700 <sup>H</sup>	32 <sup>H</sup>	88	96	0 <sup>L</sup>	10	12 <sup>H</sup> 1(.5) 1(SAB)
P	3	2	200	200 <sup>L</sup>	9 <sup>H</sup>	17	26	3 <sup>L</sup>	5	8 <sup>H</sup> 2(.5)
Q	6.5	5	900	1700 <sup>H</sup>	9 <sup>H</sup>	25	26	6 <sup>H</sup>	38	5 <sup>L</sup> 1(.5)
R	1	1	100	300 <sup>L</sup>	0 <sup>L</sup>	0	0	4 <sup>H</sup>	11	8 <sup>H</sup> 1(SAB)
S	5.5	4	1200	1200 <sup>H</sup>	0 <sup>L</sup>	0	15	12 <sup>H</sup>	20	6 <sup>L</sup> 1(.5)
T	3	2	200	600 <sup>L</sup>	1 <sup>L</sup>	4	9	2 <sup>L</sup>	9	2 <sup>L</sup> 1(SAB)
U	8	6	1300	2700 <sup>H</sup>	5 <sup>H</sup>	21	31	9 <sup>H</sup>	38	8 <sup>H</sup> 2(.5)
V	4	3	900	900 <sup>H</sup>	4 <sup>H</sup>	12	16	13 <sup>H</sup>	28	8 <sup>H</sup>

Table 3

Relationships Between Productivity Measures

	No. of Top Publications Authored		
		High	Low
	Number of Student Credit Hrs. Generated	High	9
	Low	2	8 10
		11	11

	No. of Top Publications Authored		
		High	Low
	Number of Active Ph.D.'s	High	5
	Low	6	5 11
		11	11

	No. of Active Ph.D.'s		
		High	Low
	Number of Student Credit Hrs. Generated	High	6
	Low	5	5 10
		11	11



Table 2

Relationships Between Productivity and Rewards

		Average Merit Raise		
		High	Low	
No. of Top Publications Authored	High	5	6	11
	Low	5	6	11
		10	12	
		Average Merit Raise		
		High	Low	
No. of Student Credit Hours Generated	High	6	6	12
	Low	4	6	10
		10	12	
		Average Merit Raise		
		High	Low	
No. of Active Ph.D.'s	High	7	4	11
	Low	3	8	11
		10	12	

productivity also tend to maximize research productivity.

- 6) Programs having more active Ph.D. candidates are not associated with more faculty research productivity.

### Discussion

The pronouncements or lore of higher education systems and the way they operate, at least in the discipline of Education, seem quite disparate. Productivity appears unrelated to rewards, perhaps because decisions about rewards are made in the absence of hard data about productivity. Instructional and research productivity appear highly related suggesting that having large numbers of students to teach may not be the impediment to research suggested by many faculty. At the same time, the presence of active Ph.D. candidates appears unrelated to research productivity even though we would expect more active researchers, to not only attract more doctoral students but to use their presence as an enhancement to research productivity.

It would be possible to use the data generated by

a management information system to insure a relationship between productivity and rewards and between productivity and the allocation of resources by identifying the most productive programs and directing both rewards and other resources to them.

One can only speculate why rewards and resources have not been allocated as a function of productivity. So-called equity considerations might be one important factor. Equity is a criterion which is not only different from but perhaps even at variance with productivity criteria.

Then there is the matter of the culture of the academic community and the respective roles within it of faculty and administrators. The academic culture is characterized by autonomy and independence and does not lend itself to either organized action or the passing of judgment. Power and control are not necessarily in the hands of the most productive faculty. Moreover, administrators are invariably drawn from the ranks of the faculty but are often not among the most productive faculty, despite the wording of job advertisements. The pressure within the academic culture reflects what might be called regression toward the mean, the result of which is not to make reward decisions on the basis

of productivity.

In order to make a merit pay system "work," it is necessary to consider some of the issues which needed to be evaluated by the faculty members as they apply their merit pay criteria. The issues include the following:

1. Differences in half-step increases need to be explained in terms of the merit pay criteria. Any salary differences resulting from unexplained fluctuations must be addressed as equity adjustment issues. Provision are made in the union contract (see Figure 1) for these adjustments within "Statutorily Required Equity Adjustments." In addition, the College Dean may wish to address some of the equity adjustment cases on an individual basis with other discretionary raises.
2. Faculty members with one outstanding year should be able to move temporarily ahead of others. This must be balanced by careful productivity considerations. The faculty publications and salary increases over the past five years were considered to be useful measures to address these concerns.

3. Several critical balances need to be maintained as the institution strives to maintain equity and quality at the same time. Assigned and faculty initiated work, quality and quantity of output, individual and institutional goals, documented evidence and peer evaluations, teamwork and individual accountability, program continuity and faculty mobility all need to be considered either within the merit part criteria of the faculty members or in the other discretionary actions by the College Dean.

### Conclusions

This issues related to criteria for faculty merit pay continue to be difficult for administrators, faculty members and institutional researchers. The complexity is increased when the criteria for merit pay are determined by the faculty members and department head and deans must decide how to use other discretionary funds to reward faculty members. From the experience of the College of Education at the Florida State University the following conclusion can be drawn.

1. Any data base used to support or to balance faculty decisions on merit pay needs to be created not from faculty self-reports but from institutional records which carry the signatures of each faculty member involved. Pay checks, grade reports, assignment forms etc. are examples of the kind of basic data required.
2. The data needs to be collected in a timely fashion from several existing sources including the business office, the departmental secretaries, and only as a last resort, from the faculty members themselves. Special data collection projects which involve lengthy questionnaires or interview schedules are always subject to criticism of design and analysis and often become the target to those faculty members who were not awarded merit.
3. Data summaries for merit pay purposes raise other questions about the policy and operations of the college. The issues of equity and the academic culture grow out of the summaries prepared for this study.

4. Data bases need to contain information on both the quantity and the quality of faculty productivity. Quantity imbalances can be corrected by the allocation on re-allocation of faculty positions while quality can be rewarded by some system of merit pay. Historical data on both need to be a part of the knowledge base for any system which involves faculty generated merit pay criteria.

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