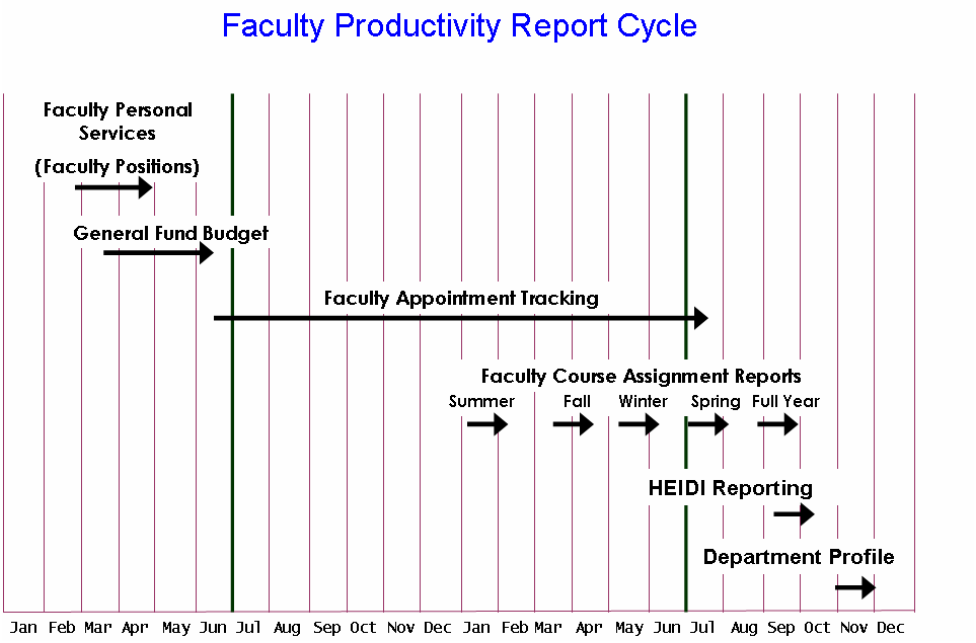
"Faculty Productivity" Reports

Introduction

For more than 15 years, the Management Information Systems section of Institutional Research and Information Management has been producing a series of reports detailing faculty course assignments. The processes behind these reports are crucial to state reporting and the reports themselves have become the de facto standard for determining faculty productivity. With recent personnel changes and changes in data systems, it is an opportune time to review the purpose and the content of reports. The purpose of this document is to provide an overview of how the processes and reports have evolved, to discuss some of the policy issues involved and to provide the basis for further discussion. Since the most visible results of the reports have been related to faculty productivity, that is how they will be referred to here.

Any discussion of faculty productivity reports requires an awareness of the interplay among several major data systems, especially the **faculty appointment and position control** system and **instructional cost analysis** process. Because of its longevity, it is assumed that the reader is familiar with the Faculty Appointment system, so this will not be discussed in detail. The genesis of the Faculty Course Assignment reports, from which the most widely distributed faculty productivity ratios are derived, is not widely known and thus merits more detailed discussion.

The components which determine faculty productivity reporting consist of a series of processes and reports that span a two-year cycle, with the budget for the upcoming year being developed as the reporting for the prior year is completed.



Faculty Positions and Faculty Appointment System

Faculty appointment information, including Continuing Education appointments, as distinct from faculty personnel data, is maintained by the Academic Affairs Budget office. Graduate assistant and doctoral fellow appointments are derived from the Human Resources module of Banner. Primarily a budgeting and manpower tracking tool, the faculty appointment system was first implemented in 1976. In 1992, the underlying mechanics were updated while the data elements and reports remained similar. Each appointment for tenure-track faculty and lecturers is maintained. The Faculty Appointment system remains the sole source for FTE actual data and is

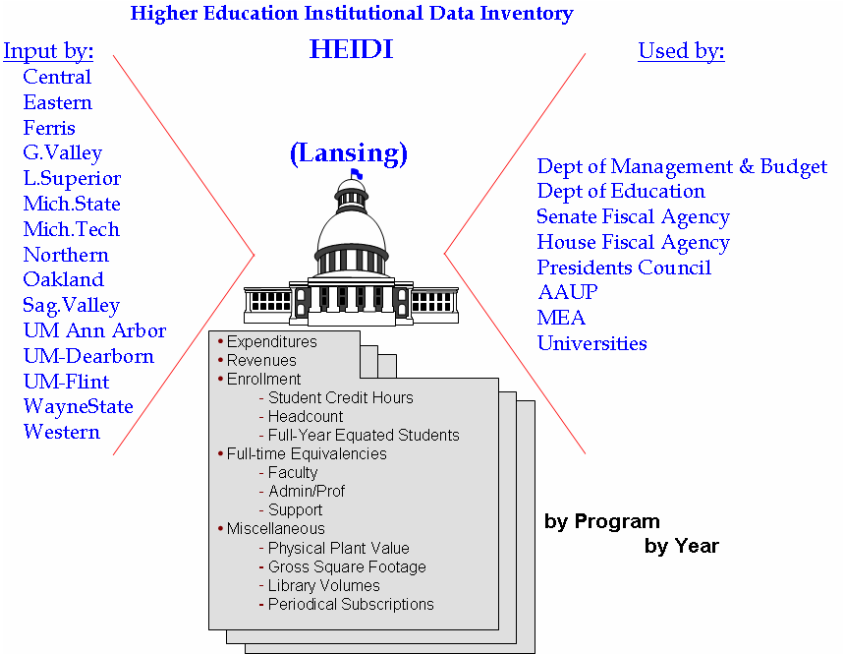
an easily trackable source for faculty base salary data. FTE data for Staff, including department heads and other academic administrators, are derived from the Human Resources module of Banner as needed.

Beginning in 1993, faculty position control was implemented in order to enhance the development and monitoring of the faculty budget. In general, a separate position exists for each tenure-track faculty member, each full-time lecturer and some adjunct lecturer positions. Pool positions exist for most lecturer and spring/summer faculty pools. A unique position number identifies each authorized position.

State Reporting

(Budget Request and HEIDI Data)

Each year, the appropriation legislation requires that the state-supported universities report various operational data to the Department of Management and Budget (DMB). The database known as the **Higher Education Institutional Data Inventory (HEIDI)** contains data going back to 1975. The database is administered by DMB and is physically located on a computer run by the Michigan Information Center in Lansing. DMB issues detailed instructions (approximately 75 pages) for the reporting of data. Enrollment data and the reconciliation of financial data to the University's financial statement are subject to audit by the Auditor General's office. HEIDI provides a consistent basis for comparison and analysis by various agencies and the universities.

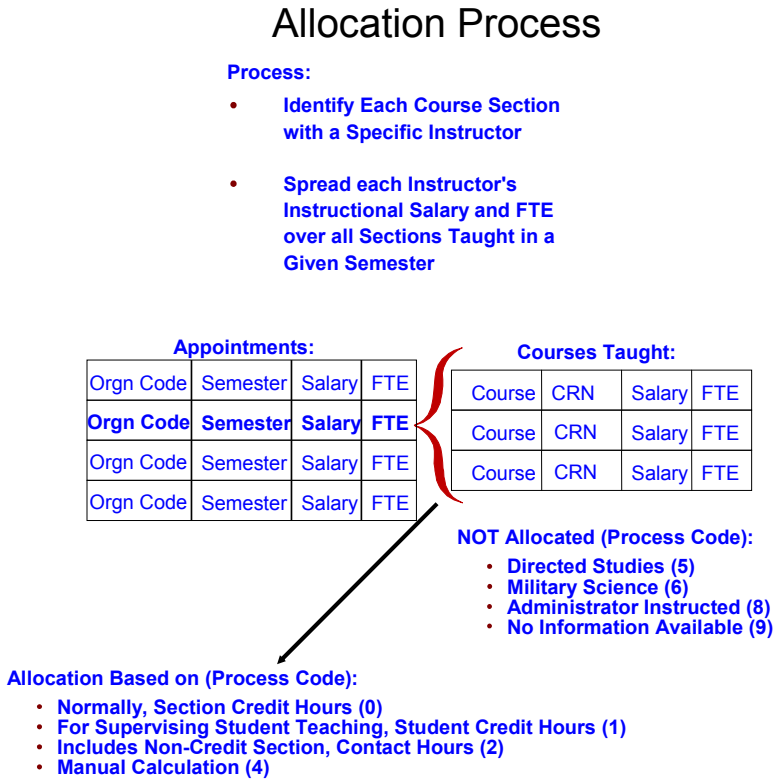


Enrollment, full-time equivalency (FTE), and expenditure data are reported by program (discipline) and class level. The costing methodology calls for the determination of **direct cost**, that is, the assignment of faculty salary expenditures to all courses taught within a given discipline and course level. Specifically, the procedures call for us to:

1. Identify each course section with a specific instructor.
2. Spread each instructor's general fund salary over all course sections taught for a given term.
3. Allocate general fund faculty salaries to course sections taught based on the credit value of the section and the total credit hour load of the instructor for each term.
4. Accumulate salaries by course level and discipline following the course designation, not the organizational unit that paid the salary.

The accumulation of direct cost by discipline is based on the subject code. The accumulation by level is determined by the course number.

Once the direct cost has been determined, the total cost, including salaries for administrative and support staff, fringe benefits, contractual services, supplies and materials, equipment, travel and other miscellaneous items, taken from the Finance module of Banner and reconciled by the Budget Management office, are distributed to the discipline based on the direct cost and then apportioned to the instructional level, again based on the direct cost. FTE data, taken from the Faculty Appointment System file, are distributed in like manner. (The above considerations apply only to faculty in instructional accounts. Faculty members with appointments in non-instructional accounts are converted to administrative FTE for reporting purposes.)



There are several implications for faculty productivity resulting from the interpretation we have given to the costing methodology guidelines in terms of academic department heads, graduate assistants and independent and directed study sections.

1. Academic department heads are reported as administrative/professional personnel rather than as ranked faculty and, hence, courses taught by department heads (or other administrators who do not have a supplemental lecturer appointment) are not allocated a cost. Professional/Technical staff who teach courses as part of their regular jobs (such as Teacher/Placement Specialists in Mathematics) are allocated manually and summarized as adjunct lecturers.

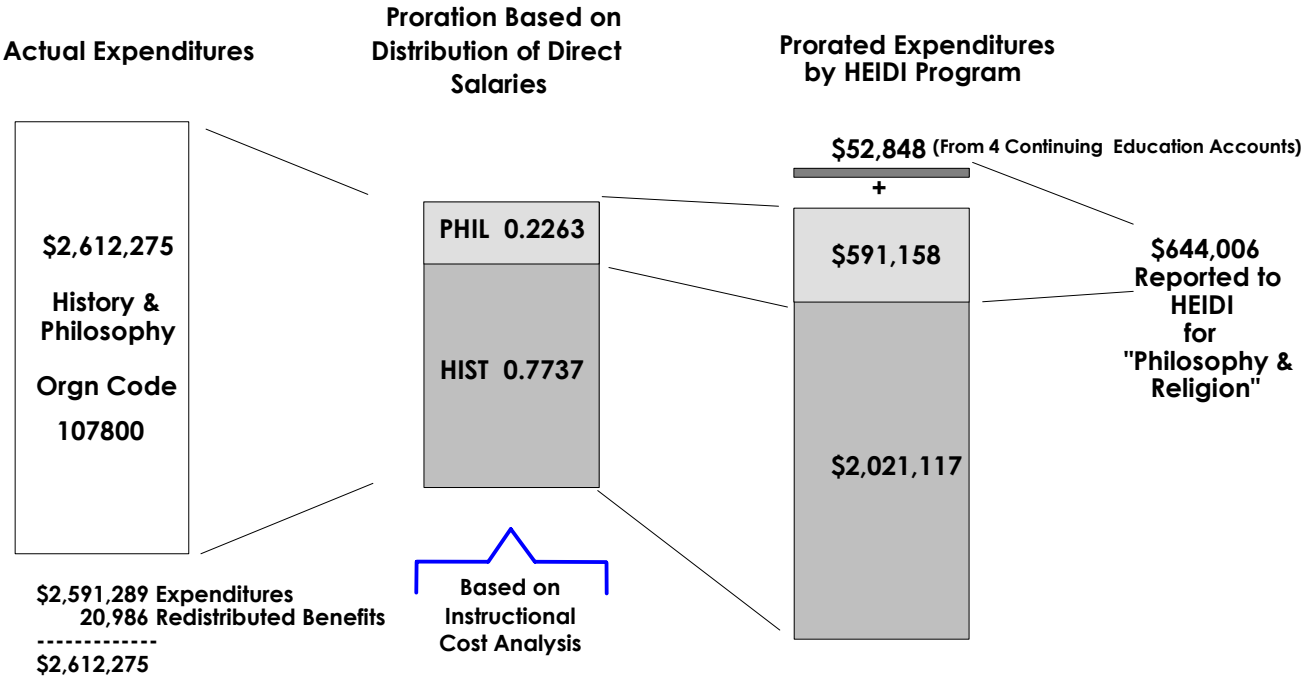
2. Prior to fiscal year 1997, sections taught by graduate assistants were not allocated a cost. Starting with Summer, 1996 sections taught by graduate assistants and doctoral fellows are allocated a cost based on the graduate assistant appointment.

3. Consistent with University policy that independent and directed study is normally not included in the determination of faculty load, all independent and directed study sections receive no allocation of cost.

An Example

Perhaps an example will help to make clear how this works. In fiscal year 1999-00, the History and Philosophy department had expenditures of $2,591,289. As part of the year-end accounting close, another $20,986 in undistributed fringe benefit cost was charged. The question, then, is how much of the resulting $2,612,275 should be allocated to "Philosophy & Religion" and how much to "Social Science & History," the two disciplines under which History and Philosophy courses fall.

Based on the Instructional Cost Analysis process, it was determined that the percentage of the direct salary cost of philosophy courses (prefix PHIL) was 22.63%. Of the total expenditures, then, $591,158 was allocated to "Philosophy & Religion." In a similar manner, there were four Continuing Education accounts from which an additional $52,848 was allocated, bringing the total to $644,006. This is the amount that was entered into the HEIDI data system for total expenditures under "Philosophy & Religion."

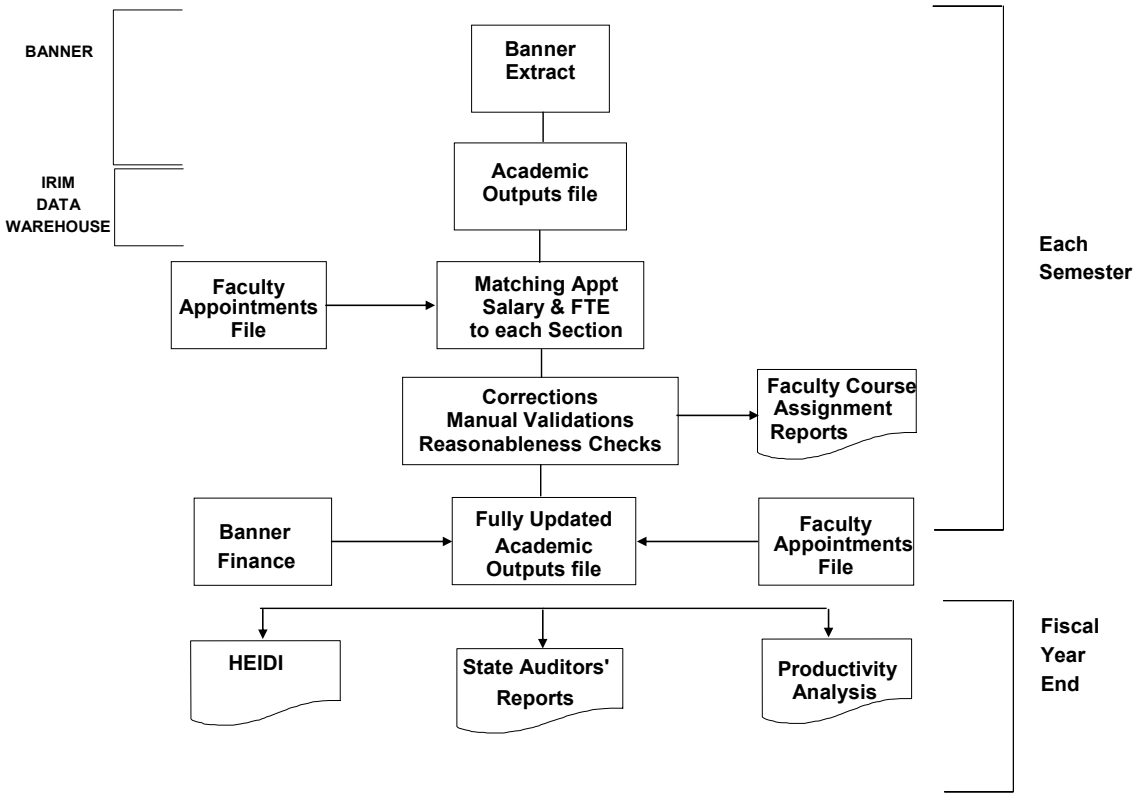


The important point is that although the results of the Instructional Cost Analysis are not directly reported, they are essential for accurate reporting.

Faculty Course Assignments

In order to comply with the appropriation legislation, IRIM undertakes what we call the Faculty Course Assignment process. Due staff changes and other factors, the semester reports have not been published for the past two years. It is our intent to reestablish the schedule for fiscal year 2005-06.

Faculty Course Assignment Process



For each course section for a given semester, an attempt is made to allocate the direct salary cost. Each section is given a "Process Code" (PRO-CODE), which indicates the method by which the cost is allocated.

This program allocates the direct salary expense for each semester to each section taught by each faculty person in accordance with the following allocation rules.

1. When a faculty person teaches a normal load including only regular credit bearing sections, the cost, i.e., direct salary allocation is based upon the number of section credit hours. (code = 0)

2. When a faculty person supervises student teachers, the cost allocation is based upon the number of student credit hours produced. (code =1)

3. When a faculty person teaches at least one non-credit bearing laboratory course, or similar activity, the cost allocation for the entire semester load is based upon section contact hours, rather than section credit hours. (code = 2)

4. Process code = 3 is not currently used.

5. When one of the above rules can not be applied, a manual cost allocation is attempted. As a matter of practice, all Continuing Education sections are manually allocated based on data received from Continuing Education. (code = 4)

6. All independent and directed study sections, mostly enrolling only one or two students, receive no allocation of cost. This is consistent with the University policy that independent and directed study is normally not included in the determination of faculty load. (code = 5)

7. For military science sections, no cost allocation is made. (code = 6)

8. When a section is taught by a graduate assistant or doctoral fellow, the cost allocation for the entire semester load is based upon the number of sections. (code = 7)

9. When a section is taught by an administrator with no-faculty appointment, primarily academic department heads, no cost assignment is made. (code = 8)

10. A final category is a default mode when no allocation is made. This results from having erroneous data in the file or a section for which no appointment was made, usually resulting from unpaid adjunct faculty. (code = 9)

Reports

There are a series of reports which deal with faculty productivity issues:

Personal Services - Faculty: General Fund (Authorized Faculty Positions)

This report documents all authorized faculty/lecturer positions for the General Fund, with the exception of the Continuing Education portion of the instructional program. These data provide the basis for the faculty personal services portion of the General Fund Operating budget.

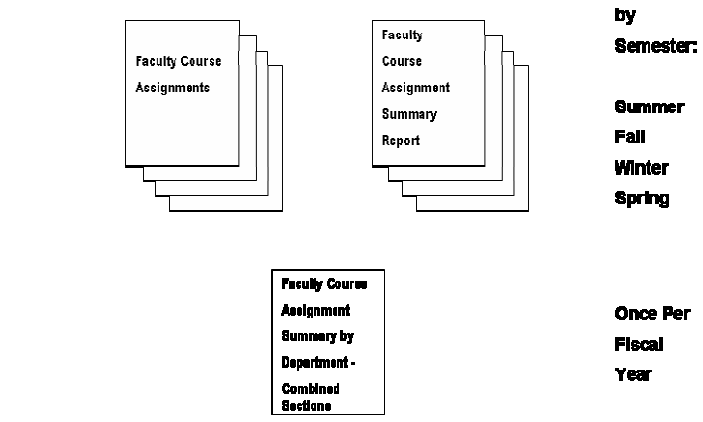
Faculty Appointments

The faculty appointment file is maintained by Academic Affairs and reflects appointments made against the authorized positions. This file remains the only source of FTE data. The faculty appointment reports, most notably the "Faculty Appointments by Account" report are distributed by Academic Affairs.

Faculty Course Assignments

For several years, the results of the instructional cost analysis were published in the Budget Request document but were not widely distributed on campus. Beginning in 1987, the Faculty Course Assignment family of reports was developed in order to give the provost, deans and department heads information necessary for efficient administration of the instructional program.

The "Faculty Course Assignments" Report Family



The main report, entitled "Faculty Course Assignments," contains the following fields.

Field Name	Description	Values	
NAME	Instructor Name		
SSN	Banner "E" ID		
RANK	Appointment System Rank / Tenure Status		
SUBJ	Course Subject		
CRS	Course Number		
CRN	Section ID		
TYPE	Section Type		
		AMU	Applied Music
		CP	Cooperative Education
		DEC	Distance Education, Comp Video
		DEI	Distance Education, Ind Learng
		DEO	Distance Education, Online
		FE	Field Experience
		IST	Independent Study
		L	Lecture
		LAB	Laboratory
		LLA	Comb - Lecture, Laboratory
		LLR	Comb - Lecture, Lab, Recitatn
		LRE	Comb - Lecture, Recitation
		MIG	MI Intercoll Grad Studies Prog
		PLA	Prior Learning Assessment
		REC	Recitation
		ST	Studio
		WL	Web Laboratory WebCT
		WLB	Lab w/WebCT Online Component
		WLE	Lect w/WebCT Online Component
		WLL	Comb Lec/Lab-WebCT Online Comp
ENRL	Section Enrollment		
CREDIT HOURS	Section Credit Hours		
CONTACT HOURS	Section Contact Hours		
SCH	Student Credit Hours		
SALARY	Salary Allocated for Section		
FTEF	Full-time Equivalent Faculty		
PROCESS CODE (PRO-CODE)	Process Code	**Allocated:**	Allocation Based On:
		0 = Direct Allocation	Section Credit Hours
		1 = Faculty Supervises Student Teachers	Student Credit Hours
		2 = Faculty Teaches Non-Credit Course	Contact Hours
		3	Not used
		4 = Manual Allocation	
		7 = Graduate Assistant	Section Credit Hours or Contact Hours
		Non-Allocated:	
		5 = Directed Study	
		6 = Military Science	
		8 = Dept. Head (or Other Administrator)	
		9 = Erroneous Data or No Appointment	
ACADEMIC/CONT ED	Academic/Continuing Education Indicator	A = Academic, C = Continuing Education	
MEMO			
LOCATION	Main Campus or Cont. Ed. Location		

The summary reports include several more data elements:

Summary-Related Data Elements:		
FYES	Full-Year Equated Students	Calculation based on credit hours by course level
INSTRUCTIONAL PRODUCTIVITY	Ratio of Full-Year Equated Students to Full-Time Equated Faculty	
FTEF SALARY	Salary Total divided by Full-Time Equivalent Faculty Total	
FTEF SALARY COST/SCH	Full-Time Equivalent Faculty Salary Cost per Student Credit Hour	
PERCENTAGES:	Percentage of Total Sections, Student Credit Hours, and Full-Year Equated Students taught by each group in the left-hand column	

Academic Department Profile

The Academic Department Profile constitutes a concise and convenient review of key faculty, student and course information for the University, colleges and academic departments, with the Continuing Education program treated separately. Included are sections on faculty, FTEF, average salary, program inventory, enrollment by program, EMU cumulative GPA, degree recipients, productivity and instructional costs.

HEIDI Report

There is not a HEIDI report per se, but the information is used in a number of ad hoc reports.

The "Standard" Definition of Instructional Productivity is:

Instructional Productivity = FYES / FTEF

(For Allocated, Non Continuing Education Sections)

Where FYES is Full Year Equated Student and is based on Student Credit Hours for each Course Section:

FYES = SCH / 30 for Undergraduate
FYES = SCH / 24 for Graduate
FYES = SCH / 16 for Doctoral

Where FTEF is Full Time Equated Faculty and is based on the total instructional Appointment(s)

NOT Allocated:

- **Directed Studies**
- **Military Science**
- **Administrator Instructed**
- **No Information Available**

Definitions of Faculty Productivity

Faculty productivity is defined as the ratio of full-year equated students to full-time equivalent faculty (FYES/FTEF). Which values are used obviously have an impact on the result.

The first complication arises from the way the value of full-year equated students is calculated. Prior to Fiscal Year 2001-02, the Faculty Course Assignment reports used a divisor of 31 for undergraduate students. Starting with Sumer 2001, the Faculty Course Assignment reports were changed to use a divisor of 30, to conform to state guidelines. Until fiscal year 1998-99, the state reporting required an elaborate procedure to calculate the FYES based on the level of the **students** enrolled, whereas for the Faculty Course Assignment reports, the calculations are based on the level of the **courses** taught. The state guidelines were changed to use the course level.

The second complication arises from which value of FTEF is used. Either the total number of appointment FTE (which are typically higher) or the total number of FTE for which we have been able to make an assignment to a course section can be used. When using the **assigned** FTE, either the total FYES or just the allocated FYES can be factored in.

The third complication is that, due to the complications involved in having Continuing Education be on a self-funding basis, the usual definition of productivity does not include continuing education courses.

Other purposes might very well call for other combinations. It should be clear, therefore, that there is no single definition of "faculty productivity."

Conclusions

The first obvious conclusion is that there is no all-purpose definition of faculty productivity. Different, but equally valid, methods of calculating productivity can lead to different ratios, depending on the purpose at hand. Also, not mentioned before is the inherent tension between a well-managed instructional program and the students' concern that productivity rise so high as to negatively impact the quality of instruction.

It should also be obvious that the calculations can only be as accurate as the underlying data. Therefore, it is important for the academic departments to keep the Academic Affairs Budget office informed of all faculty appointment changes and input all instructor changes into Banner. This is especially important as Banner allows departments to have more control over the data.