

DOCUMENT RESUME

ED 141 382

TM 006 267

AUTHOR Centra, John A.
 TITLE Faculty Development Practices in U.S. Colleges and Universities.
 INSTITUTION Educational Testing Service, Princeton, N.J.
 SPONS AGENCY EXXON Education Foundation, New York, N.Y.
 REPORT NO ETS-PR-76-30
 PUB DATE Nov 76
 NOTE 96p.
 AVAILABLE FROM Institutional Research Program in Higher Education, Educational Testing Service, Princeton, New Jersey 08540 (\$2.00)

EDRS PRICE MF-\$0.83 HC-\$4.67 Plus Postage.
 DESCRIPTORS *College Faculty; Colleges; Developmental Programs; Faculty Development; Financial Support; *Higher Education; *Improvement Programs; Manpower Development; Organization; *Professional Continuing Education; Program Effectiveness; Program Evaluation; Questionnaires; *Staff Improvement; *Teacher Improvement; Teacher Participation; Typology; Universities; Use Studies

ABSTRACT

Questionnaires on faculty improvement and professional development in 2-year, 4-year, and graduate colleges and universities were studied. The 756 respondents provided information on existing programs in their institutions. The estimated use and effectiveness of various development activities, types of faculty members involved, funding, and types of programs are discussed. The bulk of funding for development programs (70%) was provided by the institution, with some assistance from federal and state funds. Various types of faculty members participated in development activities on a voluntary basis. Administrative units organizing continuing faculty education were in existence between one and four years, and their programs were not yet adequately evaluated. Generally, development practices were divided into 4 categories: traditional activities such as sabbatical leave, programs conducted by experienced members of the faculty, instructional assistance from specialists, and assessment of teacher quality. (GDC)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

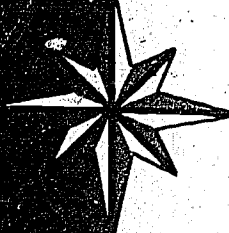
ED141382

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

PR-76-30

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

FACULTY DEVELOPMENT PRACTICES IN U. S.
COLLEGES AND UNIVERSITIES



John A. Centra

Supported by a grant from the
Exxon Education Foundation

TM006 267

"PERMISSION TO REPRODUCE THIS COPY-RIGHTED MATERIAL HAS BEEN GRANTED BY

Educational
Testing Service
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."



November 1976
EDUCATIONAL TESTING SERVICE
PRINCETON, NEW JERSEY

FACULTY DEVELOPMENT PRACTICES IN U.S.
COLLEGES AND UNIVERSITIES

John A. Centra

Educational Testing Service
Princeton, New Jersey

Supported by a grant from the
Exxon Education Foundation

November, 1976

Copyright © 1976 by Educational Testing Service. All rights reserved.

Contents

List of Tables and Figures	iii
Chapter 1. Introduction and Design of the Study	1
Previous Literature	3
Procedure	5
The survey questionnaire	8
Overview	10
Chapter 2. Estimated Use and Effectiveness of Development Practices	11
Institution-Wide Policies or Practices	11
Analysis of Assessment Practices	13
Workshops, Seminars or Similar Presentations	17
Media, Technology, and Course Development Practices	20
Miscellaneous Practices	23
Five Unused or Little Used Practices Considered Essential	24
Chapter 3. Faculty Members Involved in Development Practices	25
Faculty Involvement According to Type of Institution	30
Chapter 4. The Organization and Funding of Programs	33
Funding	35
Evaluation of Programs	42

Contents (cont.)

Chapter 5. Typologies of Development Practices	45
Grouping Practices According to Approximate Use	46
Grouping Practices According to Rate Effectiveness	50
Which groups of practices were rated as most effective?	54
Intercorrelations among the Factors	55
Characteristics of Institutions with Comprehensive Development Programs	55
Chapter 6. Some Conclusions and Implications	59
Faculty Participation Practices Programs	61
A Final Word	65
References	67
Appendix A. Initial Letter to Each Institution	71
Appendix B. Survey Questionnaire	73
Appendix C. The Growth Contract	77
Appendix D. Factor Analysis of Approximate Use of the Faculty Development Practices, Promax Primary Factor Loadings	79
Appendix E. Factor Analysis of the Effectiveness Ratings of the Faculty Development Practices, Promax Primary Factor Loadings	81
Appendix F. Factor Analysis of Practices (Approximate Use) Within Two- and Four-Year Colleges	83
Appendix G. Additional Topics Listed by Respondents for Workshops, Seminars, and Similar Presentations	87

List of Tables and Figures

Table 1.	Summary of Numbers Responding to Initial Inquiry and to the Four-Page Questionnaire	7
Table 2.	Use and Estimated Effectiveness of Institution-Wide Policies or Practices in Development	12
Table 3.	Estimated Use and Effectiveness of Development Practices: Analysis or Assessment Practices	15
Table 4.	Estimated Use and Effectiveness of Analysis or Assessment Practices, by Type of Institution	16
Table 5.	Estimated Use and Effectiveness of Development Practices: Workshops, Seminars, Programs	18
Table 6.	Estimated Use and Effectiveness of Development Practices--Workshops, Seminars, Programs--by Type of Institution	19
Table 7.	Estimated Use and Effectiveness of Development Practices: Media, Technology, Course Development, and Miscellaneous Practices	21
Table 8.	Estimated Use and Effectiveness of Development Practices--Media, Technology, Course Development, and Miscellaneous Practices--by Type of Institution	22
Table 9.	Estimated Extent to Which Various Groups of Faculty Have Been Involved in Development Activities	26
Table 10.	Organization of Faculty Development Programs	34
Table 11.	Consortium or Regional Group Participation	36
Table 12.	Funding Sources for Each Type of Institution	39
Table 13.	Funding Change in the Proportion of the Annual Institutional Budget Used for Faculty Development Over the Past Two Years	41
Table 14.	Evaluation of Faculty Development Programs or Activities	43
Table 15.	Factor Analysis of the Approximate Use of the Faculty Development Practices	47

List of Tables and Figures

(continued)

Table 16.	Factor Analysis of the Effectiveness Ratings of the Faculty Development Practices	52
Table 17.	Correlations among the Approximate Use Factors and Correlations among the Effectiveness Ratings Factors	56
Figure 1.	Student ratings of Teacher Effectiveness, by Number of Years of Teaching	28
Figure 2.	Percentage of Institutions by Type that Reported <u>Very Few</u> of the Various Groups Involved in Faculty Development Activities	31
Figure 3.	Funding from Various Sources as Percentages of Total Budget for Faculty Development	37
Figure 4.	Estimated Percentages of Money from Various Sources Spent on Faculty Development Activities	40

INTRODUCTION AND DESIGN OF THE STUDY

Why faculty development now? Why during the past few years and not 10, 20, or 40 years ago?

In some respects faculty development is not exactly new. Most colleges and universities have had some practices to aid in the professional development of their staffs; sabbaticals and financial assistance to attend professional meetings, for example, have been available for years. But it has been mainly in the 1970s that faculty development has expanded to include a variety of practices and special programs. The majority of programs and practices that have been devised attempt to help faculty members grow in teaching effectiveness by sharpening their teaching skills and knowledge. Other practices try to help faculty better understand themselves and their institutions, or try to foster better environments for teaching and learning.

Several reasons might be cited for the recent upsurge in faculty development. First, there has been a decrease in faculty mobility due to a declining rate of growth in postsecondary education. With less turnover and less new blood, colleges can no longer depend on new staff to help keep them vital; nor can teachers broaden perspectives simply by changing jobs. Teaching improvement programs and faculty renewal efforts of various kinds have become a partial remedy for this steady state condition.

Another reason for the recent emphasis on faculty development and instructional improvement is the general disenchantment-- expressed by students, parents, and legislators--with the quality of college instruction. Students seem less timid about expressing their dissatisfaction than they once were, and many parents are not at all sure that instruction is as effective as the high costs of a college education suggest it should be. Legislators have pressured public institutions to become more accountable and in some states have earmarked funds specifically for instructional improvement. At the national level, a 1972 report submitted to the President and Congress by the National Advisory Council on Education Professions Development singled out the need for more effective training of community college teachers.

It is unlikely that the recent expansion in faculty development would have been nearly as spectacular without the support provided by various funding agencies. In addition to money allocated by states to upgrade teaching, federal funding has emerged through such agencies as the Fund for the Improvement of Postsecondary Education (FIPSE) and the National Institute of Education (NIE). A number of private foundations also have focused on faculty development by funding programs at individual colleges or through consortia arrangements.

For the reasons noted, and probably more, there has been a wave of conferences and publications to help promote a variety of development practices during the past several years. Exactly what are these

practices, and how effective do they seem to be? Are there identifiable types of programs? If so, in what kinds of institutions are they found? How are development activities organized and financed? Which groups of faculty members are involved?

Several previous studies have addressed some of these questions in recent years by gathering information from selected numbers of institutions. The present study deals with the activities at an extensive national sample of institutions.

Previous Literature

A 1960 survey of 214 southern colleges by Miller and Wilson (1963) identified a few widely used practices designed to orient new faculty to an institution or to help update faculty members, such as precollege workshops, financial assistance for attendance at professional meetings, and occasional department conferences on teaching. But the authors concluded that there was "a dearth of well-articulated, comprehensively designed programs for faculty development." A briefer survey, conducted in the late 1960s with a broader sample of institutions, reached a similar conclusion (Many, Ellis, and Abrams, 1969). Still further evidence for this finding emerged from the results of a questionnaire study done as part of the AAUP Project to Improve College Teaching: Eble (1971) reported that faculty members at some 150 schools stated almost unanimously ~~that~~ their institutions did not have effective faculty development programs. Eble further

noted that few institutions set aside specific percentages of their budgets for faculty development.

Nevertheless, a handful of universities did begin instructional improvement programs in the middle to late 1960s. Alexander and Yelon (1972) collected information on about 14 so-called instructional development (or educational development) programs. More recently Crow et al. (1976) compiled descriptions of 11 development centers in southern universities. Other discussions of development programs and issues have been published by Freedman (1973), the Group for Human Development in Higher Education (1974), Erickson (1975), and O'Banion (1973, 1976). O'Banion's work has focused on instructional improvement and staff development programs in selected community colleges.

Useful models of development programs have been provided by Bergquist and Phillips (1975) and by Gaff (1975). The former describe three components of faculty development: instructional development, personal development, and organizational development. Under the first category they include such practices as curriculum development, teaching diagnosis, and training. Personal development generally involves activities to promote faculty growth, such as interpersonal skills training and career counseling. Organizational development seeks to improve the institutional environment for teaching and decision-making and includes activities for both faculty and administrators. Team building and managerial development would be part of organizational development.

Gaff's framework also includes instructional and organizational development, but he substitutes "faculty" development for "personal" development. Thus, he includes not only activities related to the affective development of faculty members but also those directed toward improved teaching behavior. Gaff views instructional development as focusing on course design and learning materials. His work and that of Bergquist and Phillips provide a departure point for the study described here.

Terminology. In this report, the term "faculty development" (at times, simply "development") is used to encompass the broad range of activities institutions use to renew or assist faculty in their varied roles. "Faculty development" has undoubtedly become the most widely used label. As Crow et al. (1976) point out, it is the one most used in periodicals and at national meetings; other program titles (e.g., "teaching-learning center," "educational development office") can meaningfully be subsumed under it.

Procedure

The study began in November 1975 with a letter sent to the president of every college and university in the United States asking whether the individual institution, or any part of the institution, "had an organized program or set of practices for faculty development and improving instruction" (see Appendix A). Both faculty development and instructional improvement were specified, because both types of programs or practices were of

interest and some respondents might not interpret faculty development in this broad sense. It was hoped this initial letter would elicit affirmative replies from institutions with relevant programs, whatever titles they used, and from institutions that had a number of development practices but no formal "programs."

Of the approximately 2,600 accredited degree-granting institutions in the country (two-year colleges, four-year colleges, and universities), 1,783 responded to the initial inquiry (Table 1). Close to 60 percent (1,044) said they had programs or sets of practices and identified the persons on campus who coordinated or were most knowledgeable about them (in a few instances more than one name was provided). Another 3 to 4 percent said they were planning programs.

Assuming that nonresponding institutions would less likely have programs, one could estimate that perhaps half or slightly more than half of the postsecondary institutions in the United States currently provide some sort of program or set of development activities for faculty. (Many that do not are very small two- or four-year institutions with fewer than 40 or 50 faculty members.) Of course, the estimate would depend on how institutions chose to interpret the question--particularly as to what constitutes a program or set of practices.

Each of the 1,044 identified college coordinators was sent a four-page questionnaire in the spring of 1976, and 756, or 72 percent of the group, responded (see Table 1). Ninety-three

Table 1

Summary of Numbers Responding to Initial Inquiry
and to the Four-Page Questionnaire

Does your institution or any part of your institution have an organized program or set of practices for faculty development and improving instruction?	Four-year colleges and universities	Two-year colleges	Totals
Yes	588	456	1044
No	416	241	657
Planning programs	58	24	82
			1783
Responses to four-page questionnaire	408	326	756*

*Includes 12 professional schools and 10 which did not identify institutional type.

doctoral-granting universities, 315 four-year colleges (B.A. or M.A. only), and 326 two-year colleges were in the final sample.

The survey questionnaire. A review of the literature and discussions with people involved in faculty or instructional development resulted in a preliminary questionnaire that was field tested. The final questionnaire (see Appendix B) included 45 development practices grouped in the following categories: (1) workshops, seminars, or similar presentations; (2) analysis or assessment procedures; (3) activities that involved media, technology, or course development; (4) institution-wide policies or practices, such as sabbatical leaves or annual teaching awards; and (5) a miscellaneous set of five practices.

The practices included those that helped faculty sharpen or update their skills as teachers, as researchers or scholars, as academic advisors, or as professionals. Also included were practices that aided in the personal development of faculty members as well as those that attempted to foster better institutional environments for teaching and learning. In short, the questionnaire contained activities from the several components of faculty development.

For all but the institution-wide policies or practices, respondents estimated the percentages of faculty at their institutions that used the practices and how effective they thought each to be. An activity might, of course, be effective even though it was used by only a small portion of the faculty. Respondents also selected

up to five practices not adopted or not widely used at their institutions that they considered essential to faculty development.

Another section of the questionnaire elicited information about the funding and organization of development activities, the kinds of faculty members most involved in programs, and general characteristics of each institution, such as type and size. Because respondents might not feel the questionnaire adequately covered development activities at their institutions, they were invited to submit additional comments and to forward prepared documents describing their programs. Many did so.

The respondents. In general, the questionnaire was completed by a director of faculty development or instructional development, a dean or associate dean, or a faculty member spending part-time as a coordinator of development activities. Their estimates of the use and effectiveness of the various practices can be expected to be somewhat more positive than those provided by faculty members or others. And the estimates are generally just that--estimates. Most of the respondents did not have hard data on hand to answer each question. They estimated the proportion of faculty involved and judged the effectiveness of the practices as they thought them to be. Nevertheless, because of their overall knowledge of the development activities on their campuses, most respondents were in a good position to provide estimations concerning the use and effectiveness of the various practices as well as information on

program funding and organization. Quite possibly, responses might differ at institutions in which several people directed different phases of the development program.

Overview

The remaining chapters of this report discuss the estimated use and effectiveness of various development practices (Chapter 2), the kinds of faculty members involved (Chapter 3), the funding and organization of activities (Chapter 4), and the types of development programs reported (Chapter 5). The final chapter summarizes the major findings and discusses some implications.

Chapter 2

ESTIMATED USE AND EFFECTIVENESS OF DEVELOPMENT PRACTICES

This chapter discusses the respondents' estimates of the extent to which the 45 development practices were used on their campuses and ratings of the effectiveness of the practices. The 45 practices had been grouped into five categories: institution-wide; analysis or assessment; workshops, seminars, or similar presentations; media, technology, and course development; and miscellaneous.

Institution-Wide Policies or Practices

Thirteen institution-wide policies or practices are listed in Table 2 along with the percentage of each type of institution at which each practice existed and the percentage of respondents indicating the practice was effective.¹ Annual awards to faculty for teaching excellence are a common practice at universities, but they were not viewed as especially effective in improving teaching: 79 percent of the universities used the awards, but only 27 percent rated them as either effective or very effective.¹ The circulation of a development newsletter or other teaching-related material also appears to be fairly ineffective at each type of institution although

¹A four-point scale of effectiveness was used: not very effective, somewhat effective, effective, and very effective (see Appendix B). Respondents could also indicate that they had no idea of how effective a practice had been. The tables combine the last two responses; hereafter in the text "effective" will also include very effective.

Table 2

Use and Estimated Effectiveness of Institution-Wide
Policies or Practices in Development

(N=756)

	Percentage of institutions at which the practice existed				Percentage indicating practice was effective or very effective ^a				Unused practices considered essential (percentage responding) ^b
	All (N=756)	2-yr. (326)	4-yr. (315)	Univ. (93)	All	2-yr.	4-yr.	Univ.	
1. Annual awards to faculty for excellence in teaching	38	20	44	79	28	37	24	27	6
2. Circulation of newsletter, articles, etc. that are pertinent to teaching improvement or faculty development	68	71	65	67	27	32	22	25	3
3. A specific calendar period is set aside for professional development	44	62	33	14	52	52	55	38	5
4. There is a periodic review of the performance of all faculty members, whether tenured or not	78	87	71	77	59	63	56	49	4
5. Sabbatical leaves with at least half salary	67	60	72	82	66	60	73	61	5
6. A policy of unpaid leaves that covers educational or development purposes.	72	70	73	80	51	47	55	49	1
7. Lighter than normal teaching load for first year faculty	21	15	23	25	53	64	51	45	6
8. Temporary teaching load reductions to work on a new course, major course revision, or research area	61	58	59	81	64	68	63	59	8
9. Travel grants to refresh or update knowledge in a particular field	52	46	56	61	64	67	64	57	4
10. Travel funds available to attend professional conferences	93	95	92	95	62	69	59	51	1
11. Visiting scholars program that brings people to the campus for short or long periods	55	37	65	86	57	60	57	54	3
12. Summer grants for projects to improve instruction or courses	58	61	56	62	70	72	66	74	5
13. There is a campus committee on faculty development	61	63	60	62	50	55	48	46	5

^a Percentages based only on institutions at which practice existed.^b Percentages are based on all institutions (N=756)

this was common at about two-thirds of the sample. Both practices have considerable visibility and signal an institution's intent to reward or publicize teaching. According to most coordinators, however, they were not seen as being effective at their institution.

Among the institutional practices seen as effective by close to two-thirds of the respondents were summer grants for projects to improve instruction, sabbatical leaves, and travel grants or funds. Interestingly enough, the latter two practices have been curtailed at many institutions in recent years because of restricted budgets. The remaining practices were viewed as effective or very effective by close to half of the schools that used them, though one practice--enabling first-year faculty to have a lighter than average teaching load--existed at only one in five of the institutions. For about half of the practices, respondents at universities gave lower effectiveness ratings than did respondents at two- or four-year colleges.

Analysis or Assessment Practices

An analysis or assessment of teaching performance ideally provides the teacher and possibly a development specialist with diagnostic information. This information may result in some dissonance or dissatisfaction in the teacher and, theoretically, this helps open him or her to change (Festinger, 1957; Heider, 1958). The analysis or assessment may come from students, from colleagues, from experts, by use of video tape, or by other means. Estimates of the use and effectiveness of 10 analysis and assessment practices

are reported in Table 3 for all institutions and in Table 4 for each of the three types of institutions.

Systematic ratings by students to help faculty improve instruction were widely used and perceived as moderately effective. At least a fifth of the faculty at over 80 percent of the 756 institutions used them. About half of the respondents estimated the ratings to be effective, although fewer university than two- or four-year college respondents saw them as effective.

Respondents rated formal or informal assessments by colleagues as less effective than either consulting with faculty who had expertise or working with master teachers (see numbers 2 and 3 versus 8 and 9 in Table 3). The analysis of in-class video tapes to improve instruction was thought to be one of the more effective practices, though it was frequently used by only a very small proportion of the faculty on campuses where it was available (about 60 percent of the institutions). Another practice rated effective but little used was the professional and personal development plan for individual faculty members (practice #10): just under 40 percent of the institutions used this practice with at least 5 percent of their faculty, and almost two-thirds of the respondents from these colleges rated it effective. These individual development plans, known also as growth contracts, usually call for a self-development program drawn up by a faculty member in conjunction with a development specialist or administrator. They were most common among the two-year colleges in the sample,

Table 3

Estimated Use and Effectiveness of Development Practices: Analysis or Assessment Practices
(N=756 Institutions)

	Estimated Extent of Faculty Use ^a Percentage of Faculty					Estimated Effectiveness ^b Percentage indicating effective or very effective	Unused or little used practices considered essential ^c (percentage responding)
	Not used	Fewer than		Over 50%			
		5%	5-20%				
<u>Analysis or Assessment Practices</u>							
1. Systematic ratings of instruction by students used to help faculty improve	4	4	10	14	68	50	1
2. Formal assessments by colleagues for teaching or course improvement (i.e., visitations or use of assessment form)	34	20	13	11	20	47	5
3. Informal assessments by colleagues for teaching or course improvement	23	21	23	18	12	40	2
4. Systematic teaching or course evaluations by an administrator for improvement purposes	34	10	11	9	34	53	3
5. System for faculty to assess their own strengths and areas needing improvement	33	12	13	11	30	57	9
6. Classroom visitation by an instructional resource person (i.e., a development specialist), upon request, followed by a diagnosis of teaching	62	23	8	3	3	54	10
7. Analysis of in-class video tapes to improve instruction	42	38	14	3	2	59	7
8. Faculty with expertise consult with other faculty on teaching or course improvement	30	28	23	13	6	61	4
9. "Master teachers" or senior faculty work closely with new or apprentice teachers	54	20	13	6	6	59	7
10. Professional and personal development plan (sometimes called a growth contract) for individual faculty members	63	11	8	4	13	63	14

^aFor each item the "no response" rate was between 1 and 3 percent

^bPercentages based only on institutions at which practice existed.

^cPractices that respondents considered essential to faculty development although not adopted or not widely used (less than 5 percent of faculty) at the institution. Up to five practices were selected by each respondent.

Table 4

Estimated Use and Effectiveness of Analysis or Assessment Practices,
* by Type of Institution

Two-Year Colleges, N=326
Four-Year Colleges, N=315
Universities, N=93

Analysis or Assessment Practices	Type of inst.	Estimated Extent of Faculty Use ^a					Estimated Effectiveness ^b
		Not used	Fewer than 5%	5-20%	20-50%	Over 50%	Percentage indicating effective or very effective
1. Systematic ratings of instruction by students used to help faculty improve	2-yr	4	6	10	13	67	58
	4-yr	3	3	9	16	69	46
	univ.	1	4	14	12	69	32
2. Formal assessments by colleagues for teaching or course improvement (i.e., visitations or use of assessment form)	2-yr	34	14	11	13	27	55
	4-yr	38	21	13	8	18	42
	univ.	23	32	24	13	8	33
3. Informal assessments by colleagues for teaching or course improvement	2-yr	30	18	19	16	14	47
	4-yr	20	19	26	19	12	39
	univ.	11	32	28	18	10	24
4. Systematic teaching or course evaluations by an administrator for improvement purposes	2-yr	19	7	10	15	48	60
	4-yr	46	9	12	5	24	45
	univ.	41	23	15	3	16	41
5. System for faculty to assess their own strengths and areas needing improvement	2-yr	24	9	12	12	40	61
	4-yr	39	11	13	10	25	53
	univ.	38	21	18	8	16	53
6. Classroom visitation by an instructional resource person (i.e., a development specialist), upon request, followed by a diagnosis of teaching	2-yr	59	19	11	4	5	56
	4-yr	71	19	5	1	1	53
	univ.	42	52	5	1	0	37
7. Analysis of in-class video tapes to improve instruction	2-yr	42	33	16	4	2	66
	4-yr	45	35	14	3	1	54
	univ.	27	61	10	0	1	54
8. Faculty with expertise consult with other faculty on teaching or course improvement	2-yr	28	25	24	13	8	64
	4-yr	33	27	22	13	3	57
	univ.	27	44	19	10	0	61
9. "Master teachers" or senior faculty work closely with new or apprentice teachers	2-yr	47	18	18	7	8	62
	4-yr	62	19	8	6	3	56
	univ.	51	29	16	2	1	52
10. Professional and personal development plan (sometimes called a growth contract) for individual faculty members	2-yr	55	7	7	5	23	71
	4-yr	69	12	8	3	5	56
	univ.	68	17	7	2	3	44

^aFor each item the "no response" rate was between 1 and 3 percent.

^bPercentages based only on institutions at which practice existed.

though a number of four-year colleges also use this approach. One example is Austin College's Career Development Program, a summary of which is provided as Appendix C.

Generally speaking, the analysis or assessment practices were rated as more effective by respondents from the two-year colleges than by respondents from either four-year colleges or universities (Table 4). For example, 55 percent of the two-year college respondents rated formal assessments by colleagues as effective, compared to 42 percent of the respondents from four-year colleges and 33 percent of those from the universities.

Workshops, Seminars, and Similar Presentations

From a list of 10 topics that might be the focus of workshops, seminars or similar presentations, respondents indicated that those dealing with specific techniques of instruction and with new knowledge in a field were among the best attended and most effective (Table 5). Workshops to help faculty improve their research and scholarship skills were generally least used, except at universities.

Workshops to acquaint faculty with institutional goals and characteristics of enrolled students were much more common at two- or four-year colleges than at universities, where, ironically, there is typically a broader range of goals (Table 6). In fact, on the whole, workshops and similar presentations were less often rated as effective by university respondents than by other respondents. The size of most universities, along with an emphasis on research as well as on teaching, probably contributes to this difference.

Table 5

Estimated Use and Effectiveness of Development Practices: Workshops, Seminars, Programs
(N=756 Institutions)

	Estimated Extent of Faculty Use ^a					Estimated Effectiveness ^b Percentage indicating effective or very effective	Unused or little used practices considered essential ^c (percentage responding)
	Not used	Fewer than 5%	5-20%	20-50%	Over 50%		
Workshops, seminars, programs--							
1. that explore various methods or techniques of instruction	11	16	31	19	22	57	5
2. that review subject matter or introduce new knowledge in a field	26	19	30	16	7	59	4
3. dealing with new or different approaches to develop curricula	26	26	25	13	8	50	6
4. on testing and evaluating student performance	36	27	20	8	8	45	9
5. to acquaint faculty with goals of the institution and types of students enrolled	25	17	13	12	30	53	5
6. to help faculty improve their academic advising and counseling skills	32	20	18	12	15	44	6
7. to help faculty improve their research and scholarship skills	63	19	10	3	2	35	3
8. to improve the management of departmental operations	49	20	16	7	5	51	6
9. that explore general issues or trends in education	32	21	20	13	12	38	4
10. in faculty affective development-- improving interpersonal skills or their ability to work effectively in groups, exploring educational values, and similar topics	37	24	16	11	9	49	8

^aFor each item the "no response" rate was between 1 and 3 percent.

^bPercentages based only on institutions at which practice existed.

^cPractices that respondents considered essential to faculty development although not adopted or not widely used (less than 5 percent) at the institution. Up to five practices were selected by each respondent.

Table 6

Estimated Use and Effectiveness of Development Practices--Workshops, Seminars, Programs--by Type of Institution

Two-year Colleges, N=326
Four-year Colleges, N=315
Universities N=93

	Type of inst.	Estimated Extent of Faculty Use ^a					Estimated Effectiveness ^b Percentage indicating effective or very effective
		Not used	Fewer than 5%	5-20%	20-50%	Over 50%	
Workshops, seminars programs--							
1. that explore various methods or techniques of instruction	2-yr	6	11	29	26	27	63
	4-yr	15	17	29	17	20	53
	univ.	13	30	44	8	5	45
2. that review subject matter or introduce new knowledge in a field	2-yr	21	15	33	21	9	63
	4-yr	32	22	27	12	4	54
	univ.	24	27	25	14	11	57
3. dealing with new or different approaches to develop curricula	2-yr	18	26	29	15	9	54
	4-yr	32	23	22	12	8	49
	univ.	30	35	25	5	4	40
4. on testing and evaluating student performance	2-yr	28	30	23	10	8	49
	4-yr	46	20	17	6	8	44
	univ.	35	40	18	4	2	35
5. to acquaint faculty with goals of the institution and types of students enrolled	2-yr	18	18	15	13	33	55
	4-yr	28	14	10	14	32	53
	univ.	42	26	17	5	8	42
6. to help faculty improve their academic advising and counseling skills	2-yr	31	24	16	11	16	45
	4-yr	32	14	21	14	17	46
	univ.	36	30	22	7	3	36
7. to help faculty improve their research and scholarship skills	2-yr	68	19	8	2	1	22
	4-yr	65	16	11	4	1	45
	univ.	43	28	18	5	3	32
8. to improve the management of departmental operations	2-yr	38	22	18	11	9	55
	4-yr	59	16	14	4	3	46
	univ.	50	27	16	5	0	34
9. that explore general issues or trends in education	2-yr	32	24	18	13	11	35
	4-yr	30	17	20	15	17	42
	univ.	38	27	26	8	2	26
10. in faculty affective development--improving interpersonal skills or their ability to work effectively in groups, exploring educational values, and similar topics	2-yr	32	22	18	14	12	51
	4-yr	40	22	15	11	9	51
	univ.	39	39	14	3	1	31

^aFor each item the "no response" rate was between 1 and 3 percent.

^bPercentages based only on institutions at which practice existed.

Perhaps the critical point regarding workshops and seminar programs, as pointed out by some development people, is that they be planned in response to the needs of faculty members, with participants knowing pretty much what to expect (Wergin, Mason, and Munson, 1976). With that in mind, most of the 10 topics listed (and several others added by the respondents), might serve the needs of a significant portion of faculty. One rule of thumb might be that a workshop deal not with generalities, but with topics that have the potential of providing concrete help to faculty members. For example, workshops that explore general issues or trends in education (#9 on the list) were estimated to be less effective than those dealing with the other, more specific topics.

Media, Technology, and Course Development Practices

Most of the seven practices in this category involve specialists providing teaching assistance to faculty members (Tables 7 and 8). One of the more widely used is assistance in employing audiovisual aids. Media or audiovisual specialists are not as new as most of the other instructional specialists and this may, in part, account for their greater use. A newer service, the instructional or course development specialist, existed at about a third of the institutions and was viewed as effective by 63 percent of these. Special professional libraries devoted to teaching improvement are very common but used on most campuses by only small proportions of teachers. This may be why they are not perceived as effective as many other practices.

Estimated Use and Effectiveness of Development Practices: Media, Technology,
Course Development, and Miscellaneous Practices
(N=756 Institutions)

	Estimated Extent of Faculty Use ^a					Estimated Effectiveness ^b Percentage indicating effective or very effective	Unused or little used practices considered essential ^c (percentage responding)
	Not used	Fewer than 5%	5-20%	20-50%	More than 50%		
Media, Technology, Course Development							
1. Specialists on campus to assist faculty in use of audiovisual aids in instruction, including closed-circuit television	18	13	24	23	21	66	5
2. Assistance to faculty in use of instructional technology as a teaching aid (e.g., programmed learning or computer-assisted instruction)	24	23	28	15	8	56	3
3. Specialists to assist faculty in constructing tests or evaluating student performance	59	17	12	6	4	51	10
4. Specialists to assist individual faculty in instructional or course development by consulting on course objectives and course design	64	14	9	6	4	63	9
5. Specialists to help faculty develop teaching skills such as lecturing or leading discussions, or to encourage use of different teaching-learning strategies such as individualized instruction	52	18	16	8	5	57	11
6. Simulated procedures that enable faculty to learn and practice specific teaching skills (e.g., micro-teaching)	68	20	6	3	2	45	7
7. Special professional library readily accessible to faculty dealing with instructional methodology, teaching skills, psychology of learning, and similar topics	32	23	20	14	9	37	4
Miscellaneous Practices							
1. Use of grants by faculty members for developing new or different approaches to courses or teaching	19	36	32	10	3	71	6
2. Visitations to other institutions (or to other parts of this institution) to review educational programs or innovative projects	13	34	33	13	6	58	3
3. Faculty exchange program with other institutions	69	22	4	0	1	45	8
4. Faculty take courses offered by colleagues	24	51	17	4	1	50	3
5. Personal counseling provided individual faculty members on career goals, and other personal development areas	53	22	11	6	5	50	6

^aFor each item the "no response" rate was between 1 and 4 percent.

^bPercentages based only on institutions at which practice existed.

^cPractices that respondents considered essential to faculty development although not adopted or not widely used (less than 5 percent) at the institution. Up to five practices were selected by each respondent.

Table 8

Estimated Use and Effectiveness of Development Practices--Media, Technology, Course Development, and Miscellaneous Practices--by Type of Institution

Two-Year Colleges, N=326
 Four-Year Colleges, N=315
 Universities, N=93

	Type of inst.	Estimated Extent of Faculty Use ^a					Estimated Effectiveness ^b
		Not used	Fewer than 5%	5-20%	20-50%	Over 50%	Percentage indicating effective or very effective
<u>Media, technology, course development</u>							
1. Specialists on campus to assist faculty in use of audiovisual aids in instruction, including closed-circuit television	2-yr	15	9	20	25	30	74
	4-yr	23	14	26	21	15	57
	univ.	10	19	33	26	12	65
2. Assistance to faculty in use of instructional technology as a teaching aid (e.g., programmed learning or computer-assisted instruction)	2-yr	19	19	27	20	13	61
	4-yr	30	24	28	11	5	50
	univ.	18	35	29	14	3	58
3. Specialists to assist faculty in constructing tests or evaluating student performance	2-yr	56	18	11	6	7	51
	4-yr	71	12	8	5	2	49
	univ.	29	36	27	8	1	52
4. Specialists to assist individual faculty in instructional or course development by consulting on course objectives and course design	2-yr	57	10	12	10	8	69
	4-yr	75	12	5	4	2	53
	univ.	42	35	16	5	1	59
5. Specialists to help faculty develop teaching skills such as lecturing or leading discussions, or to encourage use of different teaching-learning strategies such as individualized instruction	2-yr	48	17	16	10	8	61
	4-yr	58	15	16	5	4	50
	univ.	38	35	20	5	1	54
6. Simulated procedures that enable faculty to learn and practice specific teaching skills (e.g., micro-teaching)	2-yr	71	17	4	3	2	50
	4-yr	69	18	7	3	2	46
	univ.	55	40	3	1	1	29
7. Special professional library readily accessible to faculty dealing with instructional methodology, teaching and similar topics	2-yr	21	21	24	17	16	38
	4-yr	43	21	18	11	4	39
	univ.	35	42	13	6	3	34
<u>Miscellaneous practices</u>							
1. Use of grants by faculty members for developing new or different approaches to courses or teaching	2-yr	22	34	29	10	3	75
	4-yr	15	34	35	9	4	68
	univ.	9	46	33	12	0	72
2. Visitation to other institutions (or to other parts of this institution) to review educational programs or innovative projects	2-yr	6	22	39	22	10	71
	4-yr	16	39	34	6	3	64
	univ.	24	63	12	0	1	41
3. Faculty exchange program with other institutions	2-yr	76	16	2	0	2	49
	4-yr	62	26	6	0	0	46
	univ.	55	40	3	0	0	38
4. Faculty take courses offered by colleagues	2-yr	26	41	21	6	2	54
	4-yr	22	59	15	3	0	46
	univ.	22	67	10	0	0	45
5. Personal counseling provided individual faculty members on career goals, and other personal development areas	2-yr	56	20	11	6	5	54
	4-yr	48	24	13	5	5	50
	univ.	61	24	7	3	3	41

^a For each item the "no response" rate was between 1 and 4 percent.

^b Percentages based only on institutions at which practice existed.

Though Table 8 suggests greater use of media, technology, and course development specialists among two-year colleges and universities, analyses by institutional size indicated that larger institutions, including four-year colleges were most likely to have these services for faculty.

Miscellaneous Practices

Five practices did not fit neatly into any of the previous categories. A summary of the responses to them is also given in Tables 7 and 8. One of the practices was used extensively and rated high in effectiveness: grants to faculty members for developing new or different approaches to courses or teaching. These grants varied from small amounts of money for minor alterations in a course to release time for faculty members with financial support. As Table 8 indicates, about 90 percent of the universities and slightly fewer of the two- and four-year colleges had faculty grant programs.

Three of the miscellaneous practices are low- or no-cost items and were judged by the respondents to be reasonably effective. One such practice involves faculty visitations to other institutions or to other parts of their own institutions to review innovative projects, a practice that two-year colleges in particular use extensively. Much less common are faculty exchange programs with other institutions, used by about a third of all institutions (slightly more by the universities). One advantage of inter-institutional or consortium arrangements among colleges involved

• in faculty development is that they make such practices as faculty exchanges easier to accomplish. And exchange programs are probably one of the less expensive ways of helping to renew faculty in their middle and later years.

The third inexpensive practice is that of encouraging faculty to take courses offered by colleagues. Three-fourths of the institutions had some faculty who did so. While most faculty probably monitor courses in their own or related disciplines, there are potential benefits from faculty learning more about unrelated fields as well--for example, a physical scientist taking a course in the humanities.

Five Unused or Little Used Practices Considered Essential

Respondents were asked to select five practices that were not used, or were little used, at their institutions, yet which they considered "essential to faculty development." The practice most frequently mentioned was the professional and personal development plan (or growth contract). Two of the practices selected concerned improving classroom testing and the evaluation of student performance (workshops on this topic and a specialist to assist faculty in constructing tests). Two other practices concerned the use of instructional development specialists to diagnose teaching following classroom visits (Table 3) and to assist faculty in course design (Table 7). Employing specialists to help faculty develop their teaching skills was another practice selected (Table 7). In general, respondents identified practices closely related to teaching improvement as essential to a development program.

Chapter 3

FACULTY MEMBERS INVOLVED IN DEVELOPMENT ACTIVITIES

Six broad descriptions of faculty members were listed in the questionnaire: younger faculty in their first years of teaching, faculty with over 15 or 20 years of teaching experience, nontenured faculty, tenured faculty, good teachers who want to get better, and faculty who really need to improve. The groups are not, of course, mutually exclusive. Respondents estimated the extent to which each group of faculty was involved in faculty development practices at their institutions. The results are presented in Table 9.

One interpretation of the responses is that sizable numbers of faculty members have been involved in the various activities. The tenured and nontenured groups would encompass essentially all teachers on campus, and as Table 9 indicates, at a fourth of the institutions "about half" of these two groups combined were involved. At another 14 or 15 percent of the institutions, "most" of the faculty participated. Unfortunately, however, some critical faculty groups were only minimally involved, as the following discussion points out.

Among the six types of faculty, the most active participants were "good teachers who wanted to get better": respondents at about 70 percent of the institutions said half or more of this faculty group were involved. Younger faculty in their first years of teaching were moderately involved in activities (at half of the

Table 9

Estimated Extent to Which Various Groups of Faculty
Have Been Involved in Development Activities

	Percentage of 756 institutional respondents indicating:				
	Very few	Some	About half	Most	No response
1. Younger faculty in their first years of teaching	13	31	23	27	06
2. Faculty with over 15 or 20 years of teaching experience	22	45	17	09	07
3. Nontenured faculty	08	34	25	19	14
4. Tenured faculty	09	41	23	10	17
5. Good teachers who want to get better	03	21	28	43	05
6. Faculty who really need to improve	40	38	08	06	08

institutions, about half or more of the younger faculty were involved). Older faculty--those with over 15 or 20 years of teaching experience--were only slightly active relative to the other groups, and there was only a small difference between nontenured and tenured/staff participation.

Given the fact that participation in most development activities is usually voluntary, it should not be especially surprising that good teachers who want to get better were said to comprise the major clientele. It is surprising, however, that on many campuses teachers needing improvement were minimally involved. At 40 percent of the institutions, very few of the teachers who needed to improve participated (line 6 of Table 9). At another 38 percent, some (less than half) of these same teachers were involved. Combining these figures gives a total 78 percent of the colleges and universities where, according to the respondents' estimates, a minority of the faculty needing improvement were involved in development programs.

It is also noteworthy that faculty in their first year or two of teaching appeared to be moderately involved in development activities and those with over 15 or 20 years of experience only slightly involved. Both are critical target groups among faculty, especially first-year teachers, as the data in Figure 1 (from another report) clearly demonstrate. Diagrammed are student ratings of the teaching effectiveness of a sample of almost 9,000 teachers from approximately 100 colleges in the United States. These were

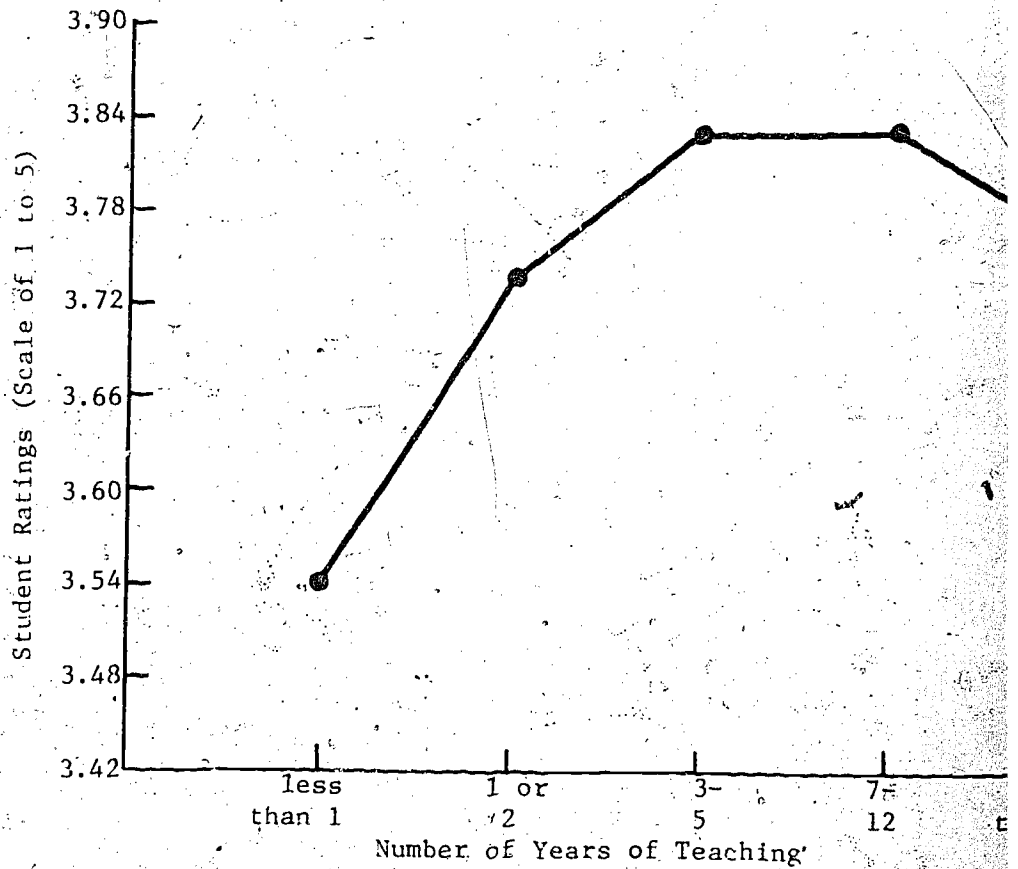
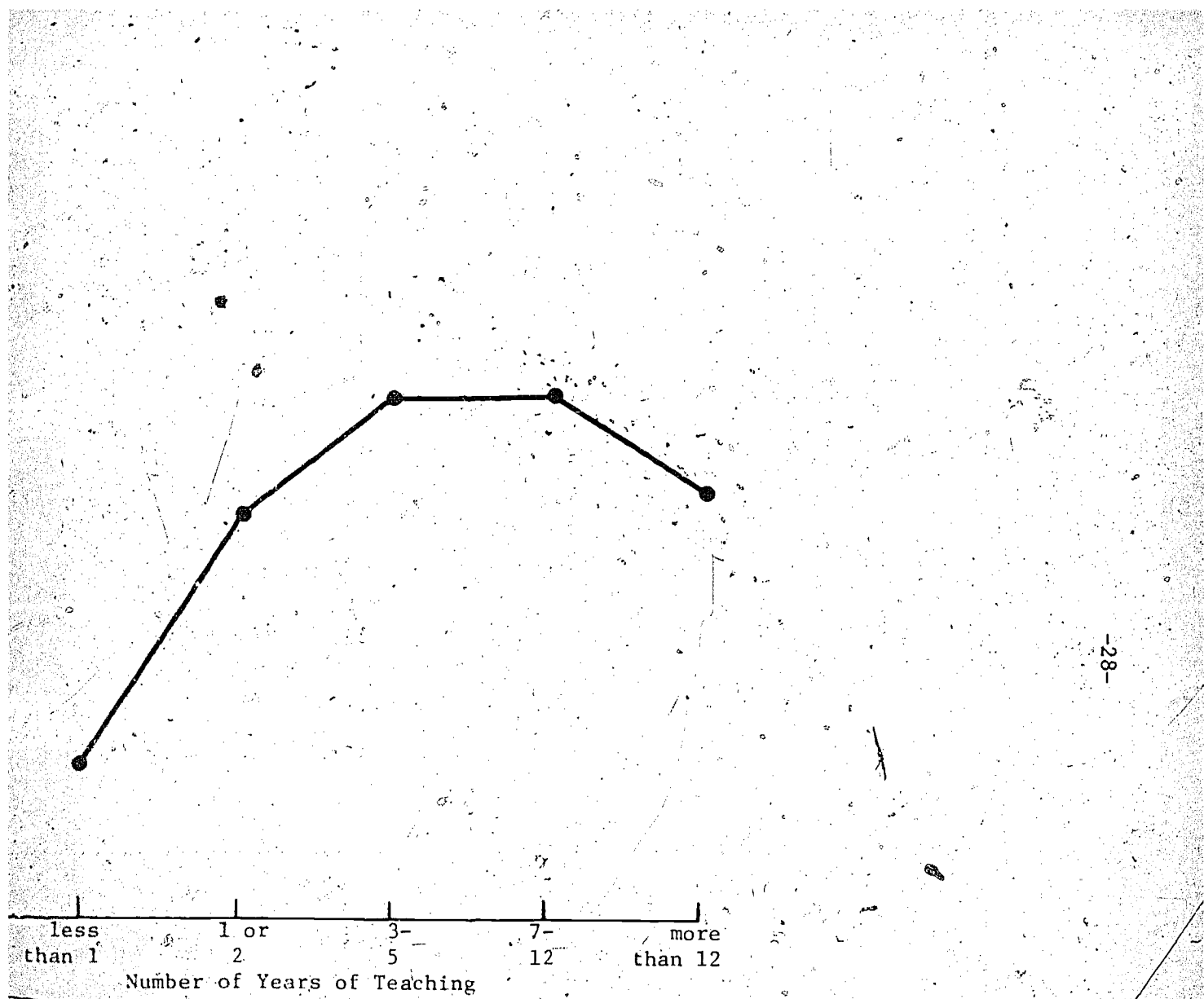


Figure 1. Student Ratings of Teacher Effectiveness, by Number of Years of Teaching
 N = 8863 Teachers



nt Ratings of Teacher Effectiveness, by Number of Years of Teaching
N = 8863 Teachers

colleges that have used the Student Instructional Report (see Centra and Creech, 1976, for further information on the study). Teachers in their first or second year of teaching received the lowest ratings. Teachers with 3 to 12 years of experience received the highest ratings, while those with more than 12 years dropped slightly in average student ratings of effectiveness.¹

Assuming that the ratings are fairly valid measures of effectiveness, as much of the research indicates, these findings suggest that beginning teachers in particular and, to some extent, teachers in their middle or later years (i.e., over 12 years) are groups that could particularly profit from teaching improvement activities, and probably for different reasons. Beginning teachers have generally learned little in graduate school about teaching per se; their first years on the job are therefore critical to learning about teaching as well as about their other professional roles. Teachers who have taught for some time are another story; they have possibly become stale in their methods, preparations, or outlook, and this can become apparent to students. It should be emphasized that there is nothing significant about the twelfth year of teaching; it simply happens to be the final category used. The drop in ratings suggests only a trend. If the last classification had, for example, been

¹The difference between first-year teachers and those with 3 to 12 years of experience was about half a standard deviation ($p < .001$). The difference between teachers with more than 12 years and those with 3 to 12 years was statistically significant ($p < .05$) but not especially large.

20 years or more experience, the drop might be more dramatic. Faculty development for some older teachers, then, may be largely a matter of breaking into their routine and getting them to try something different.

Faculty Involvement According to Type of Institution

Involvement in development practices by the six types of faculty members was also investigated within each type of institution. Universities generally had poorer participation than either two- or four-year colleges, and this was essentially true for all six groups of faculty. As illustrated by Figure 2, respondents from about 55 percent of the universities reported that very few of the faculty who really needed to improve were involved in development activities. This was the case at only about 40 percent of the two- and four-year colleges. The dual emphasis on research and teaching in universities is one reason for these institutional differences. For many university faculty members, research and writing are an essential aspect of their performance; indeed, they may in many instances be assessed largely on the basis of their publications records. Though they may also teach, such faculty members are less likely to participate in faculty development activities aimed at improving their performance as teachers.

Another institutional feature related to faculty involvement was size. Not only did the universities have relatively poor faculty participation among faculty needing improvement but so did the larger two- and four-year colleges. Respondents reported less

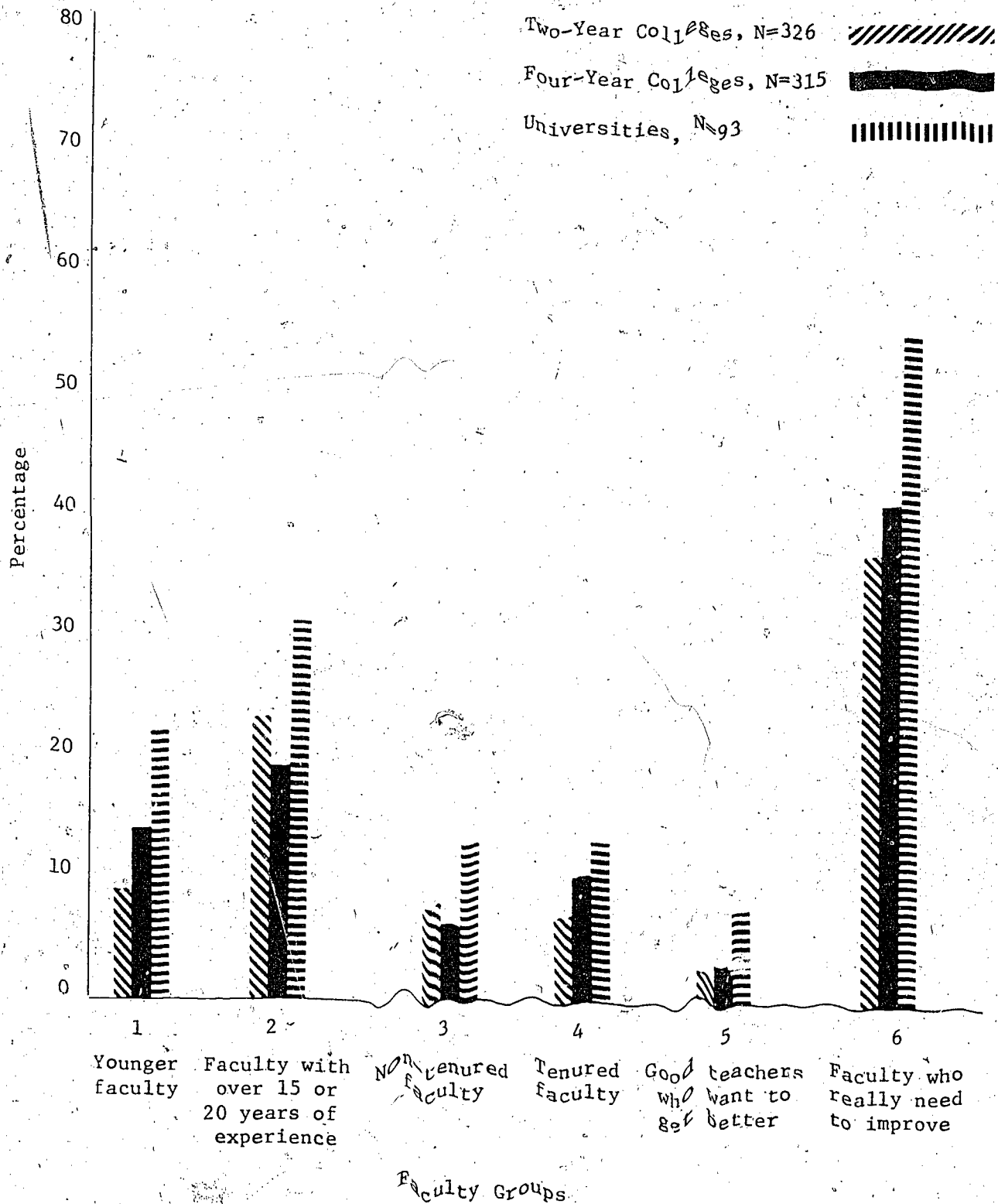


Figure 2. Percentage of Institutions by Type that Reported Very Few of the Various Groups Involved in Faculty Development Activities

involvement among the less adequate teachers at two-year colleges with over 5,000 students and at four-year colleges with over 2,500 students. Specifically, respondents from about 50 percent of the larger colleges in both categories reported that very few of the faculty who really needed to improve participated in development practices. Colleges with fewer students were more likely to have their poorer teachers involved in improvement activities.

Larger institutions might be expected to have smaller proportions of their faculty participating in activities. Communication is frequently poorer at larger institutions and therefore some faculty may not know about development activities or events. And although there may be a great variety of practices on large campuses, the proportion of faculty participating in any one of them is probably small. Workshops, for example, should have a limited attendance to be effective, and instructional development specialists cannot work with a very large number of teachers.

Chapter 4

THE ORGANIZATION AND FUNDING OF PROGRAMS

One recommendation that has been made regarding faculty development is that there should be some kind of unit or system on each campus to help coordinate and plan activities (Eble, 1971; Group for Human Development in Higher Education, 1974). Just under half (44 percent) of the 756 institutions in the sample reported having units or persons that coordinated the development activities on their campuses (Table 10). About two-thirds of the universities and half of the two-year colleges had units. One-third of the four-year colleges, mainly larger ones at that, had offices or coordinators.

Most of these units were fairly new, having existed a median of 2.3 years (Table 10). University offices had existed the longest, a median of four years, and used such titles as Educational Development Center, Center for Instructional Development Program, and Faculty Development Office. Two-year colleges had units a median of two and a half years, and many of these emphasized staff development. The staff development concept assumes that administrators and other staff members--not only teachers--can improve some part of their professional or personal functioning. Development activities are therefore encouraged for the entire staff of the college.

Offices within four-year colleges have not only had the shortest life thus far (1.4 median years), but frequently have one person

Table 10

Organization of Faculty Development Programs

	All Institutions N=756	Two-Year Colleges N=326	Four-Year Colleges N=315	Universities N=93
A. Proportion with unit(s) or person for development or instructional improvement	44%	49%	34%	65%
B. Median number of years unit has existed	2.3	2.5	1.4	4.0
C. Number of people involved (per- centage based on number from A above)	Less than 1--15%	12%	19%	13%
	1 --48%	56%	46%	27%
	2 or 3 --16%	14%	11%	31%
	4 or more --21%	18%	24%	29%

-34-

43

or a part-time person directing activities. Forty-six percent of these colleges had one person as a director or coordinator and 19 percent had a part-time coordinator (Table 10). Fifty-six percent of the two-year colleges with units had single full-time directors, but universities, not surprisingly, usually had larger staffs. For example, 29 percent of the university centers employed four or more people.

Because most small colleges would likely have trouble supporting development staffs, one possibility for these institutions is to form cooperative arrangements with other colleges. Almost a third of the four-year colleges in this study currently belong to consortia or regional groups that concentrate on faculty development (Table 11). The advantage of these interinstitutional arrangements is that they enable schools to share expertise and activities at less cost to each institution. Examples of college consortia with faculty development activities include the Great Lakes Colleges Association and the College Center of the Finger Lakes (see also the Consortium Directory, Patterson, 1975 for a list of consortia and their activities).

Funding

Given present fiscal constraints, the cost of development practices is a concern at many institutions, small and large. According to estimates provided by the 700 institutions in the sample that had the data available, an average of 70 percent of the total budget for development activities came from their institutional general funds (Figure 3). Grants from foundations or the federal

Table 11

Consortium or Regional Group Participation

Is your institution part of a consortium or regional group that concentrates on faculty development?

	All Institutions N=756	Two-Year Colleges N=326	Four-Year Colleges N=315	Universities N=93
Yes	25	24	30	12
No	72	74	66	84
No response	3	2	4	4

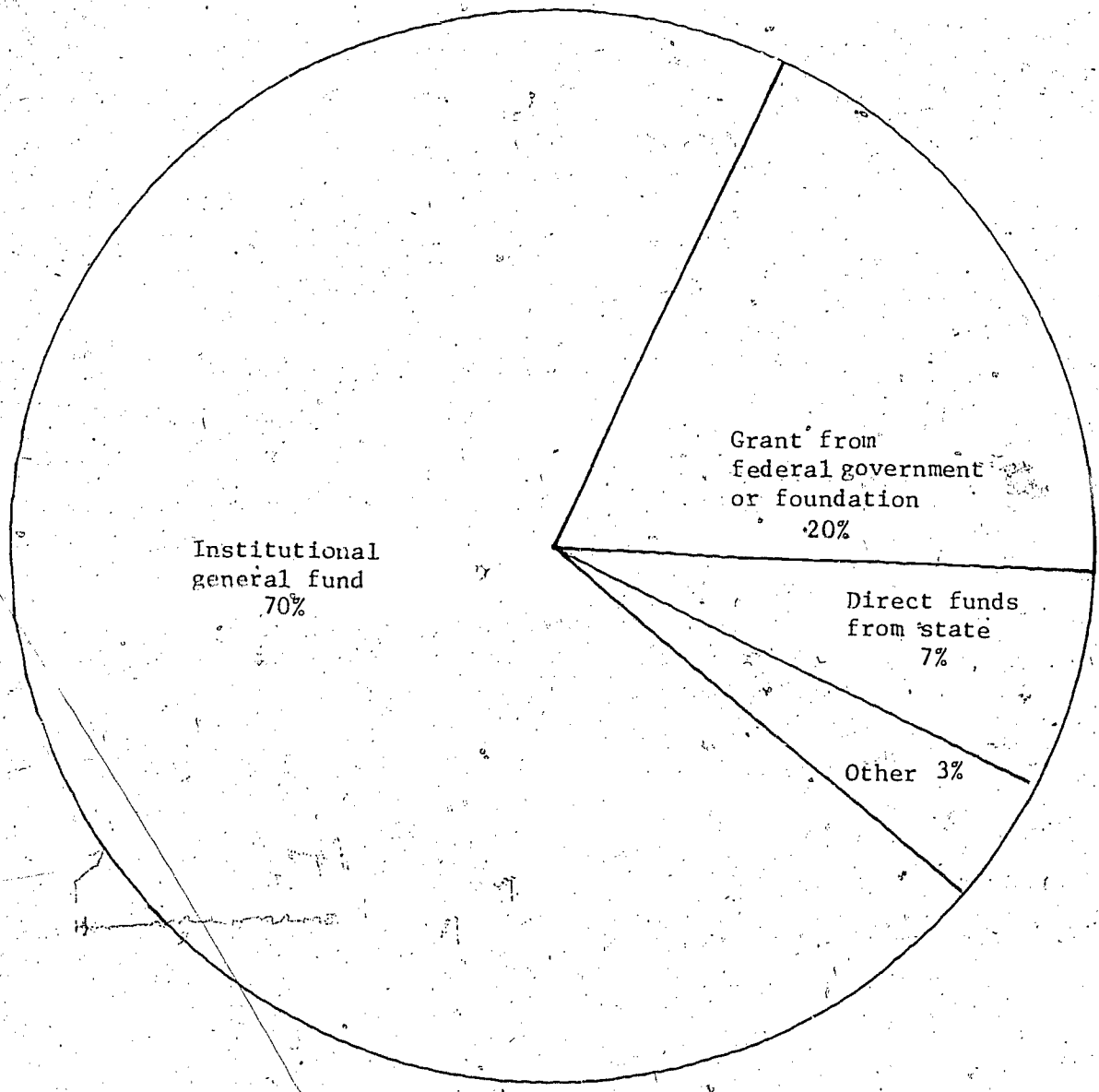


Figure 3. Funding from Various Sources as Percentages of Total Budget for Faculty Development

N=700 institutions reporting funding

government averaged 20 percent, and an additional 7 percent came from state funds. The remaining 3 percent came from such "other" sources as alumni or special funds.

Table 12, which presents funding sources for each type of institution, indicates virtually no differences between two-year colleges and doctorate-granting universities. Both received 70 or 71 percent from their own general funds and 15 or 16 percent from foundations or the federal government. Four-year colleges, however, differed in that they received a higher proportion from foundations or federal sources, 27 percent. As a group, four-year colleges received only 3 percent directly from their states, probably because so many of these institutions were private colleges.

A further breakdown of the funding information appears in Figure 4. At 3.5 percent of the institutions, foundations or the federal government provided over 70 percent of the development money; fewer than 2 percent received no money from their institutional general funds. Almost all of the institutions, then, were providing some money toward development. Moreover, as Table 13 indicates, 90 percent of the schools either increased their shares or provided about the same amount of money over the past two years. Generally, therefore, most institutions have continued their support of development programs during recent years. This support probably needs to remain at least at current levels if money provided by foundations and the state and federal government decreases, as may well occur. Several foundations and various government programs

Table 12

Funding Sources for Each Type of Institution

Proportion of total budget from:	Two-Year Colleges N=307	Four-Year Colleges N=295	Universities N=83
Institutional general fund	70	67	71
Grants from federal government or foundation	16	27	15
Direct funds from state	11	3	8
Other	3	3	6

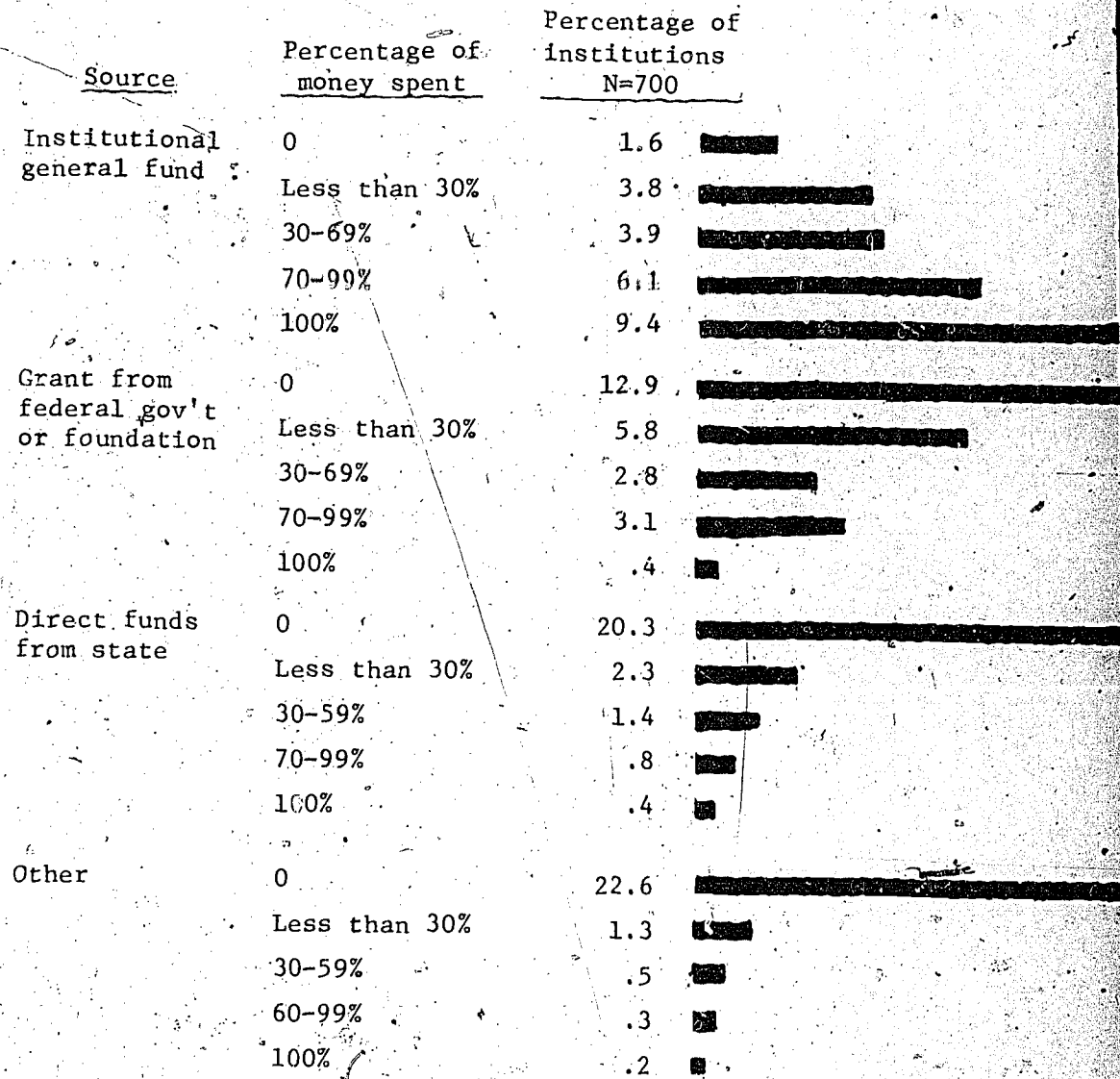
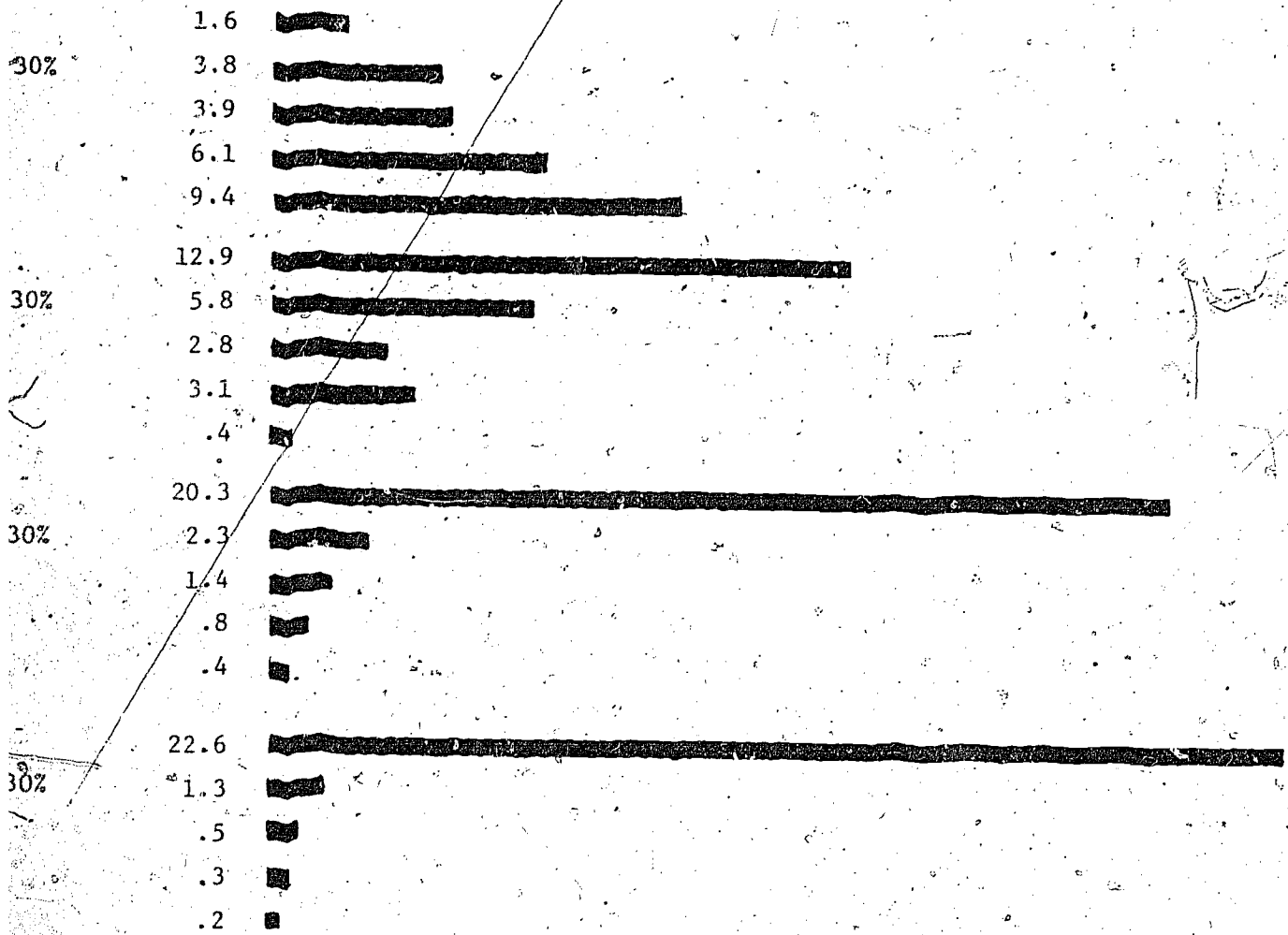


Figure 4. Estimated Percentages of Money from Various Sources Spent on F

Percentage of
Institutions
N=700



Percentages of Money from Various Sources Spent on Faculty Development Activities

-04-



Table 13

Funding Change in the Proportion of the Annual Institutional Budget
Used for Faculty Development Over the Last Two Years
(N=706 institutions reporting funding)

	All Institutions N=706	Two-Year Colleges N=326	Four-Year Colleges N=315	Universities N=85
	Percentage Responding			
Increased	45	46	46	33
Decreased	10	9	9	14
Remained about the same	45	45	45	53

have provided seed money to get development activities started, but these are generally short-term commitments.

Evaluation of Programs

The evaluation of development programs may help justify the financial support they receive and could also provide information to modify or improve services. As summarized in Table 14, only 14 percent of the institutions reported that they had evaluated their program or activities (for whatever purpose); an additional 33 percent had done partial evaluations. About half the programs had not been evaluated at all, although the recency of many programs may explain why some had not yet been assessed. Slightly more of the programs at two-year colleges had been evaluated.

A dozen or so respondents forwarded copies of their program evaluations. Judging from these, questionnaires or interviews with samples of faculty members were commonly used. Although such methods can prove helpful in tapping faculty reactions to particular services, or in ascertaining faculty awareness of a program, more sophisticated designs are probably needed to deal with such issues as accountability and the actual effects of various activities.

Table 14

Evaluation of Faculty Development Programs
or Activities

Has there been an evaluation of the faculty development program or activities at your institution?

	All Institutions N=756	Two-Year Colleges N=326	Four-Year Colleges N=315	Universities N=93
	Percentage Responding			
Yes	14	19	10	12
No	48	42	53	52
Only in part	33	35	31	31
No response	5	4	5	5

Chapter 5

TYPOLOGIES OF DEVELOPMENT PRACTICES

A major purpose of this study was to determine what major patterns of development practice exist among colleges and universities. That is, given the 45 practices listed in the questionnaire, is it possible to identify reasonable categories of activities based on the extent of faculty use among the institutions. The components of development programs that Gaff (1975), Bergquist and Phillips (1975), and others discuss are generally heuristic rather than empirical models. To what extent are "instructional development," "personal development" and "organizational development" accurate labels for what institutions are, in fact, doing? Are there more appropriate ways to categorize the development activities of colleges and universities?

To explore these questions, responses from each institution to the 45 practices were factor analyzed, enabling a grouping of the practices according to the extent to which they were used, or rated effective, at the 756 institutions.¹ The resulting factors or groups of practices were then related to the additional information collected about the institutions and their programs (Questions IV through IX of the

¹The procedure used for this and the subsequent factor analyses were the same. A principal components analysis of the 45 x 756 correlation matrix was employed. Both an orthogonal and an oblique rotation were made. Because the oblique (promax) rotation provided a better structure, the interpretation is based on this rotation.

questionnaire). This included the proportions of the various groups of faculty involved in development practices on each campus, how activities were funded and organized, and institutional characteristics, such as size, type, and source of control. This information was correlated with the factors through factor extension, a procedure that provided a better understanding of each of the factors or groups of practices.

Grouping Practices According to Approximate Use

Four factors or groups of development practices seemed to define patterns of estimated use of the practices among the institutions. These were high faculty involvement, instructional assistance practices, traditional practices, and emphasis on assessment. The four factors and the practices that have significant loadings on each factor are listed in Table 15. Factor loadings for all practices on all factors are presented in Appendix D. A discussion of the four factors follows.

1. High faculty involvement. The development practices in this first group tend to involve a high proportion of the faculty at the colleges that use them. Many of the practices are not only run for the faculty but by the faculty as well: experienced teachers work with inexperienced teachers, and those with special skills offer assistance to others. Good teachers, older teachers, and those needing improvement all tend to be involved.

Table 15

Factor Analysis of the Approximate Use of
the Faculty Development Practices

Group 1 (Factor 1): High Faculty Involvement

Factor Loading

Workshops, seminars, or program to acquaint faculty with goals of the institution and types of students enrolled.	.65
"Master teachers" or senior faculty work closely with new or apprentice teachers.	.61
Faculty with expertise consult with other faculty on teaching or course improvement.	.60
Workshops or program to help faculty improve their academic advising and counseling skills.	.57
Personal counseling provided individual faculty members on career goals, and other personal development areas.	.53
Workshops or presentations that explore general issues or trends in education.	.51
Informal assessments by colleagues for teaching or course improvement.	.48
System for faculty to assess their own strengths and areas needing improvement.	.46

Group 2 (Factor 2): Instructional Assistance Practices

Specialists to assist individual faculty in instructional or course development by consulting on course objectives and course design.	.75
Specialists to help faculty develop teaching skills such as lecturing or leading discussions, or to encourage use of different teaching-learning strategies such as individualized instruction.	.70
Specialists to assist faculty in constructing tests or evaluating student performance.	.69
Assistance to faculty in use of instructional technology as a teaching aid (e.g., programmed learning or computer-assisted instruction).	.65
Specialists on campus to assist faculty in use of audiovisual aids in instruction, including closed-circuit television.	.56
Workshops or presentations that explore various methods or techniques of instruction.	.42

Group 3 (Factor 3): Traditional Practices

Visiting scholars program that brings people to the campus for short or long periods.	.58
Annual awards for excellence in teaching.	.52
Sabbatical leaves with at least half salary.	.43
Workshops or seminars to help faculty improve their research and scholarship skills.	.43
Summer grants for projects to improve instruction or courses.	.43
Temporary teaching load reductions to work on a new course, major course revision, or research area.	.39
Use of grants by faculty members for developing new or different approaches to courses or teaching.	.37
Travel grants to refresh or update knowledge in a particular field.	.33

Group 4 (Factor 4): Emphasis on Assessment

There is a periodic review of the performance of all faculty members, whether tenured or not.	.55
Travel funds available to attend professional conferences.	.47
Systematic ratings of instruction by students used to help faculty improve.	.41
Formal assessments by colleagues for teaching or course improvement (i.e., visitations or use of assessment form).	.40
A policy of unpaid leaves that covers educational or development purposes.	.40
Systematic teaching or course evaluations by an administrator for improvement purposes.	.40

Several of the practices in this group were more likely to be used by the smaller colleges in the sample and seem appropriate for small college settings. Workshops on institutional purposes or on academic advisement are examples. In the wake of declining enrollments and higher costs, many smaller colleges have begun to examine their goals more closely. These colleges also see good academic guidance and attention to individual students as special strengths. Small institutions would also be less likely to afford full-time specialists in teaching or instructional development, thus the reliance on "master teachers" or faculty with expertise. Because of the emphasis on close personal relationships in most small colleges, they could be expected to provide counseling and other personal development practices for faculty. Smallness, finally, also apparently encourages more informal assessments by colleagues, or more self-assessment, rather than formal systems of teaching evaluation.

2. Instructional assistance practices. Instructional development is an important aspect of this second group of practices, as evidenced by the high factor loading (.75) for "specialists to assist individual faculty in instructional or course development." The second practice, specialist assistance to the faculty in improving teaching skills or strategies, is part of both instructional development programs and broader teaching improvement or faculty development programs. Three of the

additional practices also deal with providing assistance in the instructional process: (1) in teaching and evaluating student performance; (2) in applications of instructional technology to teaching; and (3) in the use of audiovisual aids. Workshops or presentations exploring methods of instruction, the last practice with a significant loading, would logically fit in with the other practices in this group.

These instructional assistance practices were found in many of the two-year colleges and in some of the universities in the sample. Few of the four-year colleges included them. Public rather than private institutions were also somewhat more likely to have these practices. Not surprisingly, most of the institutions had development units or offices on campus. Finally, in comparison to other practices, the practices that comprise this group were more likely to be evaluated in some way.

3. Traditional practices. As Table 15 indicates, the practices in this group included visiting scholars programs, annual awards in teaching, sabbatical leaves, grants for instructional improvement or travel, and temporary teaching load reductions. The only workshop or seminar included was one designed to help faculty improve their research and scholarship skills. Thus, with the exception of the use of small faculty grants to improve instruction, these practices have been used by many institutions for a number of years and are, therefore, fairly traditional.

By themselves, the activities involve a relatively small number of faculty at any one time. The practices in this group, as the further analysis indicated, were most likely to be used at universities and larger four-year colleges.

4. Emphasis on assessment. Four of the six practices with significant loadings in this group emphasize various assessment techniques as means of improving instruction. Formal ratings by students, by colleagues, and by administrators are among those listed in Table 15. A periodic review of all faculty members is also a common practice. It is interesting to note that the less formal assessment or analysis practices, such as the use of in-class videotapes or informal assessments by colleagues, are not part of the group.

Travel funds to attend professional conferences and unpaid leaves for educational or development purposes also had significant loadings on this factor.

Among the types of institutions, two-year colleges (particularly public two-year colleges) tended to emphasize the practices in this group.

Grouping Practices According to Rated Effectiveness

Types of development programs might be based not only on the extent to which practices are used among institutions, but also on how effective the respondents judged the practices to be. Because developmental practices can be effective even when they are not

being used by a large segment of the faculty, the structure of development programs based on rated effectiveness may be quite different. Indeed, there are some interesting variations.

A factor analysis of the respondents' effectiveness ratings resulted in six factors or groups of practices that appeared to best describe the structure. As with the previous analysis, these six factors were correlated through factor extension with the additional information on the institutions and their development programs in order to better understand them. The more significant practices within each factor and their factor loadings are presented in Table 16. The promax factor loadings for each practice on all six factors may be found in Appendix E. Three of the factors are similar to three from the factor analysis of uses: Instructional assistance practices, Emphasis on assessment, and Traditional practices.

1. Instructional assistance practices. Special assistance in course design, teaching strategies, audiovisual aids, testing, and instructional technology are the important practices in this first group. Other practices with high loadings are closely related to these, such as classroom visitations by an instructional resource person, simulation procedures to help faculty practice new skills, and the use of in-class videotapes.
2. Workshops, seminars, and similar presentations. The second group of practices consists entirely of workshops, seminars, or

Table 16

Factor Analysis of the Effectiveness Ratings of
the Faculty Development Practices

	<u>Factor Loading</u>
<u>Group 1 (Factor 1): Instructional Assistance Practices</u>	
Specialists to assist individual faculty in instructional or course development by consulting on course objectives and course design.	.83
Specialists to help faculty develop teaching skills such as lecturing or leading discussions, or to encourage use of different teaching-learning strategies such as individualized instruction.	.78
Specialists to assist faculty in constructing tests or evaluating student performance.	.73
Assistance to faculty in use of instructional technology as a teaching aid (e.g., programmed learning or computer-assisted instruction).	.65
Specialists on campus to assist faculty in use of audiovisual aids in instruction, including closed-circuit television.	.56
Classroom visitation by an instructional resource person (i.e., a development specialist), upon request, followed by a diagnosis of teaching.	.50
Simulated procedures which enable faculty to learn and practice specific teaching skills (e.g., micro-teaching).	.49
Analysis of in-class video tapes to improve instruction.	.45
Personal counseling provided individual faculty members on career goals, and other personal development areas.	.40
<u>Group 2 (Factor 2): Workshops, Seminars, and Similar Presentations</u>	
Workshops or seminars on teaching and evaluating student performance.	.70
Workshops or seminars to help faculty improve their research and scholarship skills.	.69
Workshops, seminars, or program to acquaint faculty with goals of the institution and types of students enrolled.	.61
Workshops or program to help faculty improve their academic advising and counseling skills.	.59
Workshops or presentations that explore general issues or trends in education.	.57
Workshops or program in faculty affective development--improving their interpersonal skills or their ability to work effectively in groups, exploring educational values, and similar topics.	.55
Workshops or presentations that explore various methods or techniques of instruction.	.50
<u>Group 3 (Factor 3): Grants and Travel Funds</u>	
Travel grants to refresh or update knowledge in a particular field.	.70
Travel funds available to attend professional conferences.	.68
Summer grants for projects to improve instruction or courses.	.59
Use of grants by faculty members for developing new or different approaches to courses or teaching.	.55
Visiting scholars program that brings people to the campus for short or long periods.	.48
Visitations to other institutions (or to other parts of this institution) to review educational programs or innovative projects.	.42
<u>Group 4 (Factor 4): Emphasis on Assessment</u>	
Formal assessments by colleagues for teaching or course improvement (i.e., visitations or use of assessment form).	.78
Systematic ratings of instruction by students used to help faculty improve.	.70
Professional and personal development plan (sometimes called a growth contract for individual faculty members).	.69
System for faculty to assess their own strengths and areas needing improvement.	.67
Systematic teaching or course evaluations by an administrator for improvement purposes.	.53
Informal assessments by colleagues for teaching or course improvement.	.46
There is a periodic review of the performance of all faculty members, whether tenured or not.	.38
<u>Group 5 (Factor 5): Traditional Practices</u>	
Faculty exchange program with other institutions.	.75
Faculty take courses offered by colleagues.	.60
Lighter than normal teaching load for first year faculty.	.56
A policy of unpaid leaves that covers educational or development purposes.	.56
Sabbatical leaves with at least half salary.	.48
<u>Group 6 (Factor 6): Lowest Effectiveness Ratings</u>	
Annual awards to faculty for excellence in teaching.	.76
Circulation of newsletter, articles, etc. that are pertinent to teaching improvement or faculty development.	.60
There is a periodic review of the performance of all faculty members, whether tenured or not.	.52

similar types of activities. Seven had loadings of .50 or more; those dealing with testing and with research and scholarship skills headed the list.

3. Grants and travel funds. Travel funds for conferences or to update knowledge, along with grants for instructional improvement projects, are significant among this group of practices. Bringing visiting scholars to the campus or visiting other places to review new programs are also included. Compared to the other groups of practices, those in this category were more likely supported by money from foundations or the federal government.

4. Emphasis on assessment. Various assessment practices comprise the fourth factor, with formal ratings by colleagues and by students having the greatest emphasis. Professional and personal development plans (or growth contracts), which are in a sense a form of assessment, are also part of this group.

Together, the practices in this category tend to involve more faculty than the other practices. Many student rating or peer rating programs would understandably include a high proportion of faculty; in fact, on some campuses it has become almost obligatory for faculty to collect student ratings of their teaching.

5. Traditional practices. Faculty exchanges, unpaid leaves of absences, sabbaticals, and the other activities listed in Table 16

are traditional ways of renewing or developing faculty in that they have been used by some institutions for a number of years. Funds for these activities, according to the respondents, are largely made available through the institutions' general funds. Compared to the other groups of practices, they tend to involve the smallest number of faculty.

6. Lowest effectiveness ratings. Two of the three practices in the last group had been given relatively low ratings of effectiveness by the respondents: annual teaching awards and the circulation of newsletters or articles pertaining to teaching.

Which groups of practices were rated as most effective? For each of the six groups of practices identified through the factor analysis of the respondents' ratings, a rough index of effectiveness was computed. The index was calculated by averaging the percentages of respondents who rated practices in the group as effective (see Chapter 2). For example, for the Grants and travel funds factor there were six practices with fairly high loadings; an average of 64 percent of the respondents reported these six to be effective or very effective, thereby ranking the factor first in effectiveness. Ranked second was the group of Instructional assistance practices (56%). Closely behind were Emphasis on assessment and Traditional practices, both with 53 percent. Ranked fifth were Workshops, seminars, and similar presentations, with an average of 46 percent of the respondents rating practices in this category as effective. As previously

discussed, the teaching awards-newsletter group received the lowest rating.

These indices of effectiveness for the six factors should be interpreted cautiously because, as noted in Chapter 2, there were significant variations in the ratings of practices within each of the six categories. For example, the respondents rated some of the workshops and seminar topics as much more effective than others. An important part of the value of a workshop is not only what is presented but how it fits in with the needs of the faculty. The same may be said about the groups of practices. Some practices may be especially useful at a particular stage of a development program's evolution.

Intercorrelations among the Factors

Intercorrelations among the six effectiveness factors and the four uses factors are presented in Table 17. All the correlations are in the low or moderate range, indicating that the factors, or groups of items, tend to be fairly independent of each other. Thus, while there is some overlap, the factors are unrelated enough to each other to represent somewhat distinct descriptions of development practices.²

Characteristics of Institutions with Comprehensive Development Programs

Judging by the written descriptions of programs provided by many respondents, it is apparent that many colleges and universities had comprehensive programs and provided a wide range of development

² Separate factor analyses of practices (uses responses) for the two- and four-year colleges were also conducted. A summary appears in Appendix F.

Table 17

Correlations among the
Approximate Use Factors

	1	2	3
1			
2	48		
3	05	02	
4	18	17	09

Correlations among the
Effectiveness Ratings Factors

	1	2	3	4	5
1					
2	48				
3	32	39			
4	52	38	35		
5	37	23	22	46	
6	37	38	38	42	34

activities for their staffs. What special characteristics, if any, did these institutions have?

In an attempt to answer this question, the schools were ranked on the factors that resulted from the factor analysis of the estimated use of practices (Table 15). An institution might be said to have a comprehensive faculty development program if it "scored high" on at least three of the four usage factors.³ Conversely, an institution that scored below average in at least three of the four categories might be said to have a limited program.

A comparison of the approximately 250 institutions that had "comprehensive" programs and the similar number with "limited" programs indicated that size was critical. About 40 percent of the limited programs were at colleges with fewer than 1,000 students enrolled. Only 16 percent of the comprehensive programs were at colleges of that size.

Colleges that are very small (i.e., under 1,000 students) would generally be less able to afford a wide variety of development practices. Instructional development and other instructional assistance practices that rely on specialists would be especially difficult for these small colleges to support. Less money would also be available to finance faculty grants for teaching innovations or travel.

³Four factor scores were assigned each institution and an overall mean score (N=756) was computed for each of the four factors. An institution was designated "high" or "low" on each factor depending on whether its score was above or below the total mean.

Chapter 6

SOME CONCLUSIONS AND IMPLICATIONS

A variety of practices and programs currently exist under the banner of faculty development, many of which have emerged in the last few years. How effective they are is not yet entirely known. The views of people who direct or are knowledgeable about development activities at 756 colleges and universities were the basis of this report. Their perceptions of the practices and programs on their campuses, while probably not free of bias, help illuminate this burgeoning area. Some implications of the findings follow.

Faculty Participation

In general the respondents thought that sizable numbers of faculty members had been involved in development practices. Yet teachers who wanted to get better were the group most involved while those needing improvement were seen as least involved.

Given the fact that participation in most development activities is usually voluntary, it should not be especially surprising that good teachers who want to get better comprise the major clientele.

After all, they are frequently the most interested in teaching.

They may also be the best group to involve in development activities in the initial stages of a program so it does not get a reputation as largely a clinic for deficient teachers. There is probably no better way to drive faculty away from a program than to identify it as a service for the inadequate.

Eventually, however, if development activities are to be deemed worthwhile, they should be subscribed to by more faculty who need to improve. Universities and the larger two- and four-year colleges (i.e., colleges over 5,000 and 2,500 students, respectively) had especially poor participation among faculty needing improvement, according to the respondents. Development activities will not necessarily make good teachers out of poor ones but they should help at least some; a few teachers might even be counseled into other careers or other academic responsibilities on their own campus. How does one draw faculty needing improvement into development practices? One possibility that has been suggested is that every faculty member spend roughly 10 percent of his or her time in improvement activities (Group for Human Development in Higher Education, 1974). These four to six hours a week might be spent on any of a number of activities, depending on the faculty member's needs; for some, it might mainly involve helping other teachers rather than receiving help. All of this could be coordinated by a campus development office or department chairmen.

Another possibility for involving more faculty in development activities--particularly those most in need of improvement--is to tie participation into the reward structure. Currently it seldom is. This might be accomplished by asking that faculty members submit accounts of their development activities each year and that these be considered in the total evaluations of the individuals.

Still another possible way to increase involvement is to tailor programs to faculty needs and interests. A carefully designed

inventory of faculty needs and attitudes may assist in identifying some preferred practices. On a continuing basis, faculty advisory committees on development can also help keep programs cognizant of faculty opinion.

Practices

"Personal development" is a recent and much discussed aspect of faculty development. Yet fewer than half the respondents said their institutions provided counseling or other personal development practices for faculty members. Faculty counseling is not a very direct way to improve teaching and consequently some development people recommend that personal or therapeutic counseling should not be the immediate or central concern of a faculty development program (Bergquist and Phillips, 1975). This seems like a reasonable position. In particular, development programs should probably not be expected to deal with faculty who have serious emotional problems. But fostering personal growth through interviews, workshops, and the like is another matter. Some proponents argue that helping teachers gain a greater awareness of themselves and their teaching styles (Sanford, 1971) or helping faculty improve their interpersonal skills will make them better professionals and better teachers. Like psychological counseling for faculty, however, these activities may not be the most appropriate to launch a development program. In fact, when asked to identify practices that were little used on their campuses but which they considered essential to faculty development, most respondents identified activities directly related to teaching improvement.

Another practice that is not yet widely used but considered as having good potential is the growth contract. These individual development plans (see Appendix C) were most common at the two-year colleges and were seen as effective by the vast majority of respondents. A major advantage of these plans is that they attempt to build on strengths and shore up weaknesses of faculty members on an individual basis. They are also probably less threatening to many people than formal ratings by colleagues or administrators.

Another individualized practice used in development is that of providing small grants to the faculty for teaching improvements or innovations. This was common in the universities and larger colleges and was generally rated as effective. According to several published reports, faculty who have received grants are highly pleased with this practice (e.g., Davis, Abedor, and Witt, 1976).

Some institutions may not have sufficient funds to start or maintain small grants programs for instructional improvement. Among the less expensive practices rated effective by many respondents were faculty exchanges or visitations to other institutions and the use of master teachers or faculty with expertise to work with other faculty.

One of the least effective practices, according to the respondents, is the annual teaching award, which is used at over three-quarters of the universities. These awards are sometimes compared to beauty contest prizes, and thus the assumption that they provide incentive to all teachers to improve teaching may not hold. At least one university was hoping to do away with monetary awards for outstanding

teaching in favor of naming a group of distinguished teachers each year. This group would then help promote good teaching on campus.

Formal ratings of faculty by students were widely used among the institutions in the sample, though it is not clear that teaching improvement was always the sole purpose for collecting ratings. Some research evidence indicates that student ratings can lead to moderate changes in some teachers (Centra, 1973). Often, unfortunately, teachers receive little interpretation of their results; even worse, teachers with poor ratings are not always sure what to do about them. Perhaps student ratings could be more effective if used as a catalyst for bringing faculty into other teaching improvement activities on campus.

Programs

The factor analysis identified four groups of practices based on their use. These groups provide some clues about the kinds of development programs different types of institutions seem to employ. One group of practices is fairly traditional in that, with one exception, it includes activities that have been part of faculty development for some time. These more traditional development efforts, such as sabbaticals and temporary teaching load reductions, were typical of some of the larger colleges and universities in the sample. Another set of related practices, found generally in some of the smaller colleges, consist of those run by and for the faculty. Examples are the use of senior teachers or faculty with

expertise to help other faculty. These smaller colleges were less able to afford specialists in "instructional assistance," the third category of practices. On the other hand, several of the larger two-year colleges and universities in the sample apparently had enough resources and staff to support specialists in instructional development, audiovisual aids, or other instructional services. The fourth and last group of practices emphasizes assessment techniques (e.g., ratings by students, colleagues, administrators); these practices were most common among the two-year colleges.

These four descriptions provide a somewhat different view of development programs than do the heuristic models discussed by Bergquist and Phillips (1975) and by Gaff (1975), though the "instructional assistance" category does overlap with their shared concept of instructional development.

Judging by the further information provided by the institutions in the sample, programs in faculty development varied in other ways as well as those described above. Some colleges had a few uncoordinated practices with minimal budgets. Limited faculty development programs, if they can be referred to as programs, were most likely to be found among the small colleges in the sample with under 1,000 students enrolled. It should be added, however, that several larger institutions--including some of the most prestigious--reported (in response to the initial letter) that they did not have programs in faculty development.

Some development programs appeared to operate on the fringes of the schools they served: coordinators reported generally

minimal faculty participation and, in some instances, that a significant part of their support came from foundations or the government.

Over 40 percent of the institutions (two-thirds of the universities) had some kind of development unit. Some had decentralized offices. A few units included several specialists in such areas as instructional development, evaluation, technology, and media. The majority, however, had more modest staffs--often only a director or coordinator. Found frequently at medium-sized two- and four-year colleges, most of these units had existed only two or three years and had not yet been evaluated adequately. In fact, fewer than a fifth of all institutions had not yet completely evaluated their programs or activities.

A Final Word

The upsurge of faculty development in the 1970s can be compared, in some ways, to the concern for student development a few decades ago, when the personal development of students was first emphasized as an important supplement to their academic growth. That concern helped spawn an array of counseling and other student services that can be found on most campuses today. Will faculty development programs also become an established part of higher education? No doubt some of the practices that have existed over the years will continue, but what about recent emphases on personal and professional growth, on organizational development, and on the newer procedures for improving instruction? Will the special development units or offices become permanent faculty services?

Although outside funds have helped many institutions start or expand faculty development programs, much of the ongoing financial support for development activities, judging by the results of this study, comes from the institutions themselves. Whether institutions will continue to sustain development programs may very well depend on the demonstrated impact of the programs.

References

- Alexander, A. T., & Yelon, S. L. Instructional development agencies in higher education. East Lansing, Michigan: Continuing Education Service, 1972.
- Bergquist, W.H., & Phillips, S.R. Components of an effective faculty development program. Journal of Higher Education, 1975, 46(2), 177-211. (Also in A Handbook for Faculty Development. Washington, DC: The Council for the Advancement of Small Colleges, 1975.)
- Centra, J. A. The effectiveness of student feedback in modifying college instruction. Journal of Educational Psychology, 1973, 65 (3), 395-401.
- Centra, J. A., & Creech, F. R. The relationship between student, teacher, and course characteristics and student ratings of teacher effectiveness. (ETS PR-76-1) Princeton, N.J.: Educational Testing Service, March 1976.
- Crow, M. L., Milton, D., Moomaw, W. E., & O'Connell, W. R., Jr. Faculty development centers in southern universities. Atlanta, Georgia: Southern Regional Education Board, 1976.
- Davis, R. H., Abedor, A. J., & Witt, P. W. F. Commitment to excellence. East Lansing: Michigan State University 1976.
- Ettele, K. Career development of the effective college teacher. Washington, D.C.: American Association of University Professors, November 1971.

Erickson, B. L. A survey of the inservice training needs and interests of instructional improvement centers. Unpublished doctoral dissertation, University of Massachusetts, 1975.

Festinger, L. A theory of cognitive dissonance. Evanston, Ill: Row, Peterson, 1957.

Freedman, M. Facilitating faculty development. San Francisco: Jossey-Bass, 1973.

Gaff, J. G. Toward faculty renewal. San Francisco: Jossey-Bass, 1975.

Group for Human Development in Higher Education. Faculty development in a time of retrenchment. Change publication, 1974.

Heider, F. The psychology of interpersonal relationships. New York: Wiley, 1958.

Many, W. A., Ellis, J. R., & Abrams, P. In-service education in American senior colleges and universities: A status report. DeKalb: College of Education, Northern Illinois University, 1969.

Miller, W. S., & Wilson, K. W. Faculty development procedures in small colleges. Atlanta: Southern Regional Education Board, 1963.

O'Banion, T. Teachers for tomorrow. Tucson: The University of Arizona Press, 1973.

O'Banion, T. Staff development: A new priority for the seventies. The College Board Review, No. 99, Spring, 1976.

Patterson, L. D. Consortium directory. Washington, D. C.:

American Association for Higher Education, 1975.

Sanford, N. Academic culture and the teacher's development.

Soundings, Winter 1971.

Wergin, J. R., Mason, E. J., & Munson, P. J. The practice of
faculty development. The Journal of Higher Education, 1976,
47 (3), 289-308.

Appendix A

Initial Letter to Each Institution

EDUCATIONAL TESTING SERVICE

PRINCETON, N. J. 08540

Form ETS 609
3-21-9000
EDUCATIONAL TESTING SERVICE

November 21, 1975

Dear President:

We are undertaking a survey of faculty development programs at colleges and universities and need your assistance. The project is supported by the Exxon Education Foundation, and its purpose is to describe existing programs that are attempting to help faculty members grow in teaching effectiveness.

Specifically, we would like to know if your institution has what you would consider an organized program or set of practices for faculty development and improving instruction. If you have such a program, we would also like the name of the coordinator or person most knowledgeable about it. We are interested in knowing of the program even if it is not institution-wide.

Could you provide this information in the space below, and return this letter to us in the enclosed prepaid envelope? We plan to contact that person or those persons directly for additional information.

Thank you for your help. We will be publishing a summary of our findings and expect that they will be of interest to you.

Sincerely,

John A. Centra
John A. Centra, Project Director

Does your institution, or any part of your institution, have an organized program or set of practices for faculty development and improving instruction?

Yes _____ No _____

If yes, who is coordinating the program (or who is the person most knowledgeable about it)? If your institution has more than one program--e.g., in different parts of the university--please list the additional names and addresses on the back of this letter.

Please print or type

Name _____

Title _____

Address _____

Name and title of person
completing this form: _____

Appendix B: Survey Questionnaire

SURVEY OF FACULTY DEVELOPMENT PRACTICES

Return to: Educational Testing Service
Princeton, New Jersey 08540
Attn: John Centra, R-227

Code No. _____

I. Listed below are a number of practices that might be used to help faculty develop in their variety of roles, particularly as teachers. Would you please indicate the extent to which the practice is used at your institution and your estimation of how effective it has been as a development practice. The extent of use is, of course, not necessarily equivalent to how worthwhile it has been. A practice may be very effective even though used by only a small portion of the faculty (or vice versa).

Extent to which it is used at your institution.

- 0 Not used (or not available)
- 1 Used by fewer than 5 percent of the faculty
- 2 Used by about 5-20 percent of the faculty
- 3 Used by about 20-50 percent of the faculty
- 4 Used by over 50 percent of the faculty

If used, how effective or worthwhile do you think it has been at your institution as a development practice.

- 0 Absolutely no idea of its effectiveness
- 1 Not very effective (or worthwhile)
- 2 Somewhat effective
- 3 Effective
- 4 Very effective (or worthwhile)

Practice (If you would like to comment about any practice, please do so below)	Approximate Use (Circle one response in each row)	Estimation of Effectiveness (Respond only if used)
A. <u>Workshops, Seminars, Programs</u> (Disregard box at left of each practice until you reach Part III of the questionnaire.)		
<input type="checkbox"/> 1. Workshops or presentations that explore various methods or techniques of instruction.	0 1 2 3 4	0 1 2 3 4
<input type="checkbox"/> 2. Workshops, seminars, or short courses that review subject matter or introduce new knowledge in a field.	0 1 2 3 4	0 1 2 3 4
<input type="checkbox"/> 3. Workshops or seminars dealing with new or different approaches to develop curricula.	0 1 2 3 4	0 1 2 3 4
<input type="checkbox"/> 4. Workshops or seminars on testing and evaluating student performance.	0 1 2 3 4	0 1 2 3 4
<input type="checkbox"/> 5. Workshops, seminars, or program to acquaint faculty with goals of the institution and types of students enrolled.	0 1 2 3 4	0 1 2 3 4
<input type="checkbox"/> 6. Workshops or program to help faculty improve their academic advising and counseling skills.	0 1 2 3 4	0 1 2 3 4
<input type="checkbox"/> 7. Workshops or seminars to help faculty improve their research and scholarship skills.	0 1 2 3 4	0 1 2 3 4
<input type="checkbox"/> 8. Workshops, seminars, or program to improve the management of departmental operations.	0 1 2 3 4	0 1 2 3 4
<input type="checkbox"/> 9. Workshops or presentations that explore general issues or trends in education.	0 1 2 3 4	0 1 2 3 4
<input type="checkbox"/> 10. Workshops or program in faculty affective development—improving their interpersonal skills or their ability to work effectively in groups, exploring educational values, and similar topics.	0 1 2 3 4	0 1 2 3 4
Other workshops, seminars, etc. (please list and comment on use and effectiveness). Comments about above practices:		



Approximate Use
(Circle one response
in each row)

Effectiveness
(Respond only if used)

Practice

(If you would like to comment about any practice,
please do so below.)

B. Analysis or Assessment Practices

	Not used	Fewer than 5%	About 5-20%	About 20-50%	Over 50%	Absolutely no idea	Not very effective	Somewhat effective	Effective	Very effective
<input type="checkbox"/> 1. Systematic ratings of instruction by students used to help faculty improve.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 2. Formal assessments by colleagues for teaching or course improvement (i.e., visitations or use of assessment form).	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 3. Informal assessments by colleagues for teaching or course improvement.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 4. Systematic teaching or course evaluations by an administrator for improvement purposes.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 5. System for faculty to assess their own strengths and areas needing improvement.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 6. Classroom visitation by an instructional resource person (i.e., a development specialist), upon request, followed by a diagnosis of teaching.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 7. Analysis of in-class video tapes to improve instruction.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 8. Faculty with expertise consult with other faculty on teaching or course improvement.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 9. "Master teachers" or senior faculty work closely with new or apprentice teachers.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 10. Professional and personal development plan (sometimes called a growth contract) for individual faculty members.	0	1	2	3	4	0	1	2	3	4

Other types of analysis or assessment practices (list with estimates of use and effectiveness). Comments about above practices:

C. Media, Technology, Course Development

	Not used	Fewer than 5%	About 5-20%	About 20-50%	Over 50%	Absolutely no idea	Not very effective	Somewhat effective	Effective	Very effective
<input type="checkbox"/> 1. Specialists on campus to assist faculty in use of audiovisual aids in instruction, including closed-circuit television.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 2. Assistance to faculty in use of instructional technology as a teaching aid (e.g., programmed learning or computer-assisted instruction).	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 3. Specialists to assist faculty in constructing tests or evaluating student performance.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 4. Specialists to assist individual faculty in instructional or course development by consulting on course objectives and course design.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 5. Specialists to help faculty develop teaching skills such as lecturing or leading discussions, or to encourage use of different teaching-learning strategies such as individualized instruction.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 6. Simulated procedures which enable faculty to learn and practice specific teaching skills (e.g., micro-teaching).	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 7. Special professional library readily accessible to faculty dealing with instructional methodology, teaching skills, psychology of learning, and similar topics.	0	1	2	3	4	0	1	2	3	4

Other types of media, technology, or course development practices. Comments about above practices:

Approximate Use (Circle one response in each row) Effectiveness (Respond only if used)

D. Miscellaneous Practices

	Not used	Approximate Use				Effectiveness				
		< 5%	5-20%	20-50%	> 50%	No idea	Not very	Somewhat	Effective	Very Eff.
<input type="checkbox"/> 1. Use of grants by faculty members for developing new or different approaches to courses or teaching.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 2. Visitations to other institutions (or to other parts of this institution) to review educational programs or innovative projects.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 3. Faculty exchange program with other institutions.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 4. Faculty take courses offered by colleagues.	0	1	2	3	4	0	1	2	3	4
<input type="checkbox"/> 5. Personal counseling provided individual faculty members on career goals, and other personal development areas.	0	1	2	3	4	0	1	2	3	4

Other miscellaneous practices. Comments about above practices:

II. Please indicate whether your institution has each of the following practices or not. If yes, estimate its effectiveness on the same scale of one to four.

Respond only if practice exists

Practice (If you would like to comment about any practice, please do so below.)	Practice exists		Effectiveness				
	1 = Practice exists	2 = Practice does not exist	0 Absolutely no idea of its effectiveness	1 Not very effective	2 Somewhat effective	3 Effective	4 Very effective
<input type="checkbox"/> 1. Annual awards to faculty for excellence in teaching.	1	2	0	1	2	3	4
<input type="checkbox"/> 2. Circulation of newsletter, articles, etc. that are pertinent to teaching improvement or faculty development.	1	2	0	1	2	3	4
<input type="checkbox"/> 3. A specific calendar period is set aside for professional development.	1	2	0	1	2	3	4
<input type="checkbox"/> 4. There is a periodic review of the performance of all faculty members, whether tenured or not.	1	2	0	1	2	3	4
<input type="checkbox"/> 5. Sabbatical leaves with at least half salary.	1	2	0	1	2	3	4
<input type="checkbox"/> 6. A policy of unpaid leaves that covers educational or development purposes.	1	2	0	1	2	3	4
<input type="checkbox"/> 7. Lighter than normal teaching load for first year faculty.	1	2	0	1	2	3	4
<input type="checkbox"/> 8. Temporary teaching load reductions to work on a new course, major course revision, or research area.	1	2	0	1	2	3	4
<input type="checkbox"/> 9. Travel grants to refresh or update knowledge in a particular field.	1	2	0	1	2	3	4
<input type="checkbox"/> 10. Travel funds available to attend professional conferences.	1	2	0	1	2	3	4
<input type="checkbox"/> 11. Visiting scholars program that brings people to the campus for short or long periods.	1	2	0	1	2	3	4
<input type="checkbox"/> 12. Summer grants for projects to improve instruction or courses.	1	2	0	1	2	3	4
<input type="checkbox"/> 13. There is a campus committee on faculty development.	1	2	0	1	2	3	4

Other practices. Comments about above practices:

II. Are there practices that have not been adopted or are not widely used at your institution that you would consider essential to faculty development? Please use the list of practices provided under Parts I (A thru D) and II and select up to five by putting a check (✓) in the box to the left of the particular practice. Add any others here:

IV. What proportion of each of the following groups of faculty members would you estimate has been generally most involved in development activities?

	Approximate Proportion (Circle one in each row)			
	Very few	Some	About half	Most
1. Younger faculty in their first years of teaching.	1	2	3	4
2. Faculty with over 15 or 20 years of teaching experience.	1	2	3	4
3. Nontenured faculty	1	2	3	4
4. Tenured faculty	1	2	3	4
5. Good teachers who want to get better	1	2	3	4
6. Faculty who really need to improve	1	2	3	4
7. Other (specify) _____	1	2	3	4

V. Funding

A. Approximately what proportion of the total money spent for faculty development activities at your institution during the past year has come from each of the following sources. The total should add to 100 percent.

	Write in approximate percentage
1. Institutional general fund	_____%
2. Grant from federal government or foundation	_____%
3. Direct funds from the state	_____%
4. Other _____	_____%
Should add to: 100%	

B. What percent of the total annual institutional budget does #1* above represent. (Circle one.)

- 1. 0-1%
- 2. 2-4%
- 3. 5-7%
- 4. 8-10%
- 5. Over 10%

C. Has the proportion of the annual institutional budget used for faculty development (circle one):

- 1. Increased over the past two years?
- 2. Decreased over the past two years?
- 3. Remained about the same?

VI. Organization

A. Does your institution have an on-campus person or unit(s) for faculty development or instructional improvement (e.g., Office of Faculty Development, Instructional Resource Unit, Teaching Improvement Unit, etc.)?

- 1. Yes
- 2. No

B. If yes, please list the title of the unit(s) and the number of full-time equivalent professional staff involved.

Title	number
_____	_____

C. How long has it (have they) existed? _____ (number of years)

VII. Is your institution part of a consortium or regional group that concentrates on faculty development?

- 1. Yes
- 2. No

If yes, give the name. _____

VIII. Has there been an evaluation of the faculty development program or activities at your institution?

- 1. Yes
- 2. No
- 3. Only in part

If yes or in part, could you describe it below or provide a copy of the report if available?

IX. Institutional Characteristics (Circle one in each category)

- A. 1. Two-year institution
- 2. Four-year college
- 3. University (with doctoral programs)
- 4. Professional school, specify _____

B. Source of control:

- 1. Private
- 2. Public

C. Religious affiliation:

- 1. None
- 2. Protestant
- 3. Catholic
- 4. Other religious group

D. Total student enrollment (full-time):

- 1. Under 1000
- 2. 1000-2500
- 3. 2500-5000
- 4. 5000-10,000
- 5. 10,000-20,000
- 6. Over 20,000

Name of institution _____

Your name _____

Title _____

Finally, we invite you to include additional comments about the faculty development program or practices at your institution--its basic strategy or emphasis, its most critical problems, etc. If there is a document that describes your program, you may want to forward a copy to us. Comments may be made on a separate sheet of paper.

THANK YOU FOR YOUR TIME AND COOPERATION.



Appendix C

The Growth Contract

The following is an example of a long-term growth contract used by one college. As described in the summary, each faculty member negotiates a development plan with a Career Development Advisor every four years. More typical are growth contracts that are "negotiated" every year by the individual staff member and a contract team. The team consists of the department chairman (or similar administrator), colleagues and possibly a development officer, students, and community representatives. The team meets with the individual during the year to help assess progress and to offer suggestions.

Example of Long-Term Growth Contract

THE CAREER DEVELOPMENT PROGRAM AT AUSTIN COLLEGE

By

Dr. Dan T. Bedsole, Executive Vice President
and Dean of the Faculty

Summary

Austin College's Career Development Program, now in its fourth year of operation, is designed to stimulate, encourage, and promote faculty growth and development. It is believed that faculty obsolescence can be prevented through participation by every faculty member in College supported self-renewal efforts based on definite understandings and commitments. Requirements and expectations for each faculty member are explicit and carefully stated so as to directly promote continuing self-renewal.

The program does not discard the traditional system of tenure and rank, but in effect, redefines these more viably within a career planning approach based on high standards of performance. An alternative is thus provided to the rigidities all too prevalent in many college personnel systems. Faculty competence can be maintained and upgraded without using demoralizing constraints such as tenure quotas. The methodology of accountability and evaluation is utilized consistent with the positive nature of the program.

This program involves the entire faculty and administrative staff at Austin College, requiring each person to develop and get approved a carefully considered, long-range career development plan. While it is expected that each plan will be implemented conscientiously, revisions may be made as needed in subsequent years.

This means that every faculty member, whether tenured or not, works out, at four-year intervals, a negotiated, individualized statement of career plans and aspirations for continued professional development, with emphasis on a creative role as an effective teacher and faculty member during the five-year period ahead. Plans for regular, systematic evaluation using a variety of means and sources are an integral part of career development planning.

At the end of each academic year the faculty member has a conference with his/her Career Development Advisor, typically the Associate Dean who serves as Executive for the faculty member's area or division. The two of them discuss the degree of success attained for goals and objectives set for the year, consider evaluation plans and results, and review progress toward the long-range goals of the faculty member's Career Development Plan. An essential aspect of the program is provision by the College of funds for expenses incurred by faculty for self-renewal activities.

In this comprehensive, caring approach the College is determined to demonstrate its concern for the continuing growth and self-renewal of its faculty along with its concern for the immediate success of its various programs. If faculty perceive such concern and commitment, the College's long-term viability as an institution of excellence will undoubtedly be enhanced.

Appendix D

Factor Analysis of Approximate Use of the Faculty Development
Practices, Promax Primary Factor Loadings
756 Institutions

	1	2	3	4
A 1	0.3326	0.4173	-0.2219	-0.0514
A 2	0.4159	0.1744	0.1043	-0.0181
A 3	0.3538	0.3033	-0.0652	-0.0694
A 4	0.4072	0.3722	-0.0562	-0.1367
A 5	0.0465	-0.0785	-0.1955	-0.0268
A 6	0.5689	-0.0890	-0.0288	-0.0052
A 7	0.5249	0.0616	0.4293	-0.1660
A 8	0.4196	0.1926	-0.0355	-0.0511
A 9	0.5070	-0.0295	-0.0425	-0.0850
A 10	0.3749	0.2900	-0.0807	-0.1029
B 1	0.1014	-0.1174	0.0250	0.4133
B 2	0.3522	-0.1640	0.1905	0.4046
B 3	0.4772	-0.2781	0.3362	0.2406
B 4	0.3675	-0.0393	-0.2095	0.3991
B 5	0.4566	0.0267	-0.0990	0.3254
B 6	0.5000	0.2586	0.1803	-0.0115
B 7	0.2805	0.1876	0.2317	0.1351
B 8	0.6016	-0.0137	0.1367	0.0897
B 9	0.6096	-0.0755	0.1360	0.0849
B 10	0.2168	0.1999	-0.0596	0.2562
C 1	-0.0780	0.5577	0.0755	0.2091
C 2	-0.0670	0.6519	0.1093	0.1788
C 3	-0.0086	0.6940	0.1648	-0.1197
C 4	-0.1265	0.7465	0.0085	-0.0671
C 5	0.1037	0.6953	0.0767	-0.1592
C 6	0.2586	0.3575	0.2076	-0.2715
C 7	0.3180	0.2774	-0.1451	0.1562
D 1	0.0562	0.2101	0.3704	0.1543
D 2	0.3279	0.2330	-0.1355	0.2473
D 3	0.3359	-0.0993	0.3364	-0.0815
D 4	0.3327	0.0917	0.0861	0.0092
D 5	0.5208	-0.0675	0.1166	-0.0431
2 - 1	0.0085	-0.0825	0.5159	-0.1415
2 - 2	0.1496	0.1666	0.1167	0.0725
2 - 3	0.1084	0.3731	-0.3181	0.1633
2 - 4	0.0998	0.0190	-0.0802	0.5518
2 - 5	-0.2134	0.0697	0.4326	0.2955
2 - 6	-0.1592	0.0456	0.3268	0.4062
2 - 7	0.2725	0.0210	0.1626	-0.3483
2 - 8	-0.0639	0.2210	0.3864	0.0056
2 - 9	-0.0338	0.1617	0.3301	-0.0031
2 - 10	-0.2754	0.1879	0.0827	0.4677
2 - 11	0.1234	-0.0995	0.5780	-0.0467
2 - 12	-0.1765	0.3133	0.4292	0.1891
2 - 13	-0.0399	0.1605	0.0537	0.0413

Appendix E

Factor Analysis of the Effectiveness Ratings of the Faculty Development

Practices, Promax-Primary Factor Loadings

756 Institutions

PRCMAX PRIMARY FACTOR LOADINGS

	1	2	3	4	5	6
A 1	0.2109	0.4996	0.0926	-0.0087	0.0044	-0.0138
A 2	0.1667	0.3790	0.0814	-0.0567	0.1978	0.0637
A 3	0.4420	0.4874	0.0424	-0.1516	-0.0744	0.0116
A 4	-0.0109	0.6981	0.0040	0.0423	0.1322	.1133
A 5	-0.2502	0.6093	0.0389	0.2980	0.0715	-0.0505
A 6	-0.0246	0.5878	-0.0368	0.0304	0.0506	0.0712
A 7	0.1561	0.6891	-0.1067	-0.0817	0.2445	-0.0071
A 8	0.1237	0.4730	-0.0880	0.3141	-0.0987	-0.0223
A 9	0.1620	0.5689	-0.0701	-0.0143	-0.2338	0.2770
A 10	0.1189	0.5482	0.0189	-0.0286	0.0080	0.0083
B 1	-0.0807	-0.0516	0.1740	0.7013	-0.2612	0.1488
B 2	-0.1417	0.0398	0.0147	0.7780	0.1024	-0.0079
B 3	-0.0445	0.0713	-0.1331	0.4573	0.2299	0.2130
B 4	0.0158	-0.0468	-0.0581	0.5317	-0.0897	0.4049
B 5	-0.0365	0.2281	0.0627	0.6723	0.0964	-0.2022
B 6	0.5049	-0.2892	-0.0698	0.2854	0.3538	-0.0123
B 7	0.4495	-0.0230	-0.3002	0.2275	0.2593	0.1568
B 8	0.3236	0.0180	-0.1264	0.3073	0.1316	0.0883
B 9	0.3269	0.0092	-0.0868	0.1268	0.2773	0.2604
H 10	0.2976	-0.0335	0.1739	0.6856	-0.1422	-0.3451
C 1	0.5621	-0.0640	0.1802	-0.0284	-0.1133	0.1867
C 2	0.6530	-0.0186	0.2004	0.0608	-0.0831	-0.0153
C 3	0.7257	0.0454	0.1004	-0.0706	0.1330	-0.1970
C 4	0.8329	0.0694	0.0044	-0.1094	-0.2165	0.0074
C 5	0.1821	-0.0296	-0.0216	-0.1165	0.1214	0.0215
C 6	0.1938	0.2689	-0.1246	0.0133	0.1277	0.0150
C 7	0.2968	0.1598	0.0754	0.1918	-0.0644	0.1456
D 1	0.4113	-0.1283	0.5457	-0.1247	0.0722	-0.0777
D 2	0.3843	0.0021	0.4151	0.2032	-0.0390	-0.1447
D 3	0.0148	0.2282	0.0868	-0.1191	0.7497	-0.1936
D 4	0.1623	0.0488	0.2328	-0.0134	0.6040	-0.1110
D 5	0.4024	0.0113	-0.0519	0.2192	0.1027	0.1804
2 - 1	0.0112	-0.0090	-0.0533	-0.1012	0.1475	0.7637
2 - 2	0.0429	0.1317	0.2258	-0.0936	-0.0308	0.5990
2 - 3	0.0778	0.1539	0.3741	0.0242	-0.1705	0.3477
2 - 4	-0.1082	-0.1065	0.2116	0.3842	-0.0790	0.5227
2 - 5	-0.2067	0.0176	0.3806	0.0828	0.4805	0.1518
2 - 6	-0.1071	-0.0058	0.2738	-0.0399	0.5584	0.1694
2 - 7	0.0010	-0.0181	0.2048	-0.0436	0.5648	0.1706
2 - 8	0.0242	-0.0962	0.3529	-0.0043	0.3279	0.2493
2 - 9	0.0497	-0.0617	0.7026	0.2333	0.1712	-0.1352
2 - 10	-0.0033	0.0102	0.6831	0.1413	0.1789	0.0401
2 - 11	-0.0428	0.1050	0.4815	0.0390	0.3040	0.0609
2 - 12	0.1735	-0.0651	0.5900	-0.2291	0.2559	0.1723
2 - 13	-0.0037	0.1722	0.3533	0.0527	-0.0173	0.3099

Appendix F

Factor Analysis of Practices (Approximate Use) Within Two- and Four-Year Colleges

Separate factor analyses of responses from the two- and four-year college groups allow a closer look at patterns of practices within each of the two types of institutions (there were not enough universities for a separate analysis of that group).

The promax primary factor loadings based on the estimated use of the practices are given in the following two pages. The reader may want to study these more closely, but in general:

- For both types of colleges, the first factor or group of practices consisted largely of workshops.
- The second factor, again for both two- and four-year colleges, were the instructional assistance practices.
- For four-year colleges, the third group of practices were mainly those in which some of the faculty provided assistance to others (e.g., senior faculty or faculty with expertise providing help). Also included were some assessment practices and personal development or counseling practices. Activities emphasized on the fourth factor were grants for instructional improvement projects and travel.
- For the two-year colleges, formal or informal assessments by colleagues distinguished the third factor. The fourth group included only a few practices, with a periodic review of all faculty members and the use of student ratings being two that seem logically related.

Appendix F

Factor Analysis of Approximate Use of Practices Among
Four-Year Colleges, Promax Primary Factor Loadings
315 Colleges

	1	2	3	4
A 1	0.6527	0.1756	-0.1632	0.0110
A 2	0.3484	0.1101	0.0192	0.2848
A 3	0.6313	0.1208	-0.0969	0.0870
A 4	0.5254	0.2900	-0.0181	0.0082
A 5	0.6573	-0.2168	0.1528	-0.1109
A 6	0.5692	-0.2229	0.1786	-0.0329
A 7	0.1059	0.2142	0.0754	0.3042
A 8	0.2787	0.2704	0.1235	-0.0320
A 9	0.6613	-0.1284	-0.0454	-0.0487
A 10	0.6216	0.0782	-0.0292	-0.0554
B 1	-0.1179	-0.0969	0.3648	0.1335
B 2	-0.2816	0.1466	0.5756	0.0529
B 3	-0.0692	-0.0468	0.5765	0.0126
B 4	0.1694	-0.1846	0.5287	-0.0059
B 5	0.4008	-0.0102	0.3313	0.0064
B 6	-0.1230	0.4394	0.3163	-0.0991
B 7	0.0210	0.4125	0.2652	0.0808
B 8	0.1077	0.1513	0.5351	-0.0737
B 9	-0.0109	0.0036	0.6918	-0.0714
B 10	0.0399	0.0280	0.3185	0.0600
C 1	-0.0392	0.4763	-0.0293	0.2000
C 2	-0.1628	0.6231	0.0356	0.2484
C 3	-0.0407	0.8006	0.0155	-0.0809
C 4	0.0041	0.6530	0.0877	-0.0523
C 5	0.2391	0.6310	-0.1065	-0.0902
C 6	-0.0132	0.6069	0.0610	-0.2170
C 7	0.1564	0.2346	0.3150	-0.0897
D 1	0.2138	0.0441	0.0071	0.4491
D 2	0.3069	0.0049	0.1146	0.1754
D 3	0.1397	0.0856	0.1817	0.0971
D 4	0.1628	-0.1223	0.3429	0.0856
D 5	0.0207	0.0390	0.5748	-0.0056
2 - 1	-0.2135	0.0596	0.1022	0.2851
2 - 2	0.0707	0.2054	-0.0676	0.1318
2 - 3	0.4348	0.2028	-0.0619	-0.0267
2 - 4	0.1532	-0.2352	0.3534	0.0867
2 - 5	-0.1384	-0.1089	0.0885	0.4844
2 - 6	-0.0671	-0.1725	0.1430	0.4788
2 - 7	0.0652	0.1694	0.2122	-0.1876
2 - 8	-0.0167	0.1158	0.2103	0.1215
2 - 9	0.0243	0.0229	-0.0078	0.4249
2 - 10	0.0772	-0.1416	-0.0675	0.4561
2 - 11	0.1149	-0.0427	0.0090	0.5770
2 - 12	-0.1014	0.1230	-0.0720	0.6460
2 - 13	-0.0009	0.3469	-0.1743	-0.0229

Appendix F

Factor Analysis of Approximate Use of Practices Among
Two-Year Colleges Promax Primary Factor Loadings
326 Colleges

	1	2	3	4
A 1	0.4433	0.3468	-0.1393	0.0547
A 2	<u>0.5330</u>	0.1213	0.0420	0.0594
A 3	<u>0.4216</u>	0.3556	-0.0762	-0.0258
A 4	<u>0.5844</u>	0.2654	-0.1494	0.0693
A 5	<u>0.6467</u>	-0.1103	0.0806	0.0640
A 6	<u>0.5495</u>	-0.0568	0.1189	0.0537
A 7	<u>0.3001</u>	0.0623	0.3332	-0.1911
A 8	<u>0.4106</u>	0.0671	0.1135	-0.0900
A 9	<u>0.4867</u>	-0.0203	0.1202	-0.0271
A 10	<u>0.3943</u>	0.2607	0.0055	-0.1358
B 1	0.2087	-0.1546	-0.0370	<u>0.5492</u>
B 2	0.1531	-0.1902	<u>0.6119</u>	0.1129
B 3	0.1851	-0.1504	<u>0.5977</u>	0.0982
B 4	0.2748	-0.1003	<u>0.0918</u>	0.3234
B 5	0.3947	-0.1069	0.2114	0.3056
B 6	0.1781	0.2438	0.3509	-0.0783
B 7	0.2704	-0.0197	<u>0.4101</u>	0.0110
B 8	<u>0.4568</u>	-0.0433	<u>0.3517</u>	0.0778
B 9	<u>0.3976</u>	-0.0461	0.4199	-0.0422
B 10	0.1581	<u>0.2390</u>	0.0981	0.1523
C 1	0.0988	<u>0.4430</u>	0.0669	0.0782
C 2	0.1521	<u>0.5624</u>	-0.0541	0.1038
C 3	0.1995	<u>0.5951</u>	-0.0250	-0.1310
C 4	0.1037	<u>0.6874</u>	-0.2295	-0.0310
C 5	0.2383	<u>0.6725</u>	-0.0669	-0.0757
C 6	0.2745	0.3197	0.2414	-0.2721
C 7	<u>0.4378</u>	0.1581	-0.0896	0.1600
D 1	-0.1232	0.2884	<u>0.5281</u>	-0.0727
D 2	<u>0.3838</u>	0.1865	0.1281	0.1938
D 3	0.1403	-0.0656	0.3126	-0.0329
D 4	0.1239	0.2108	0.1913	-0.0538
D 5	<u>0.4504</u>	-0.0102	0.1116	-0.1221
2 - 1	-0.0273	-0.0013	0.3874	-0.3134
2 - 2	0.3025	0.0110	0.0220	0.2385
2 - 3	0.2544	0.1961	-0.2358	0.2087
2 - 4	0.1442	0.0453	-0.0176	<u>0.5972</u>
2 - 5	-0.2905	0.2418	0.3583	0.2088
2 - 6	-0.2217	0.1727	0.2725	0.3450
2 - 7	0.1466	0.0086	0.1610	-0.3895
2 - 8	-0.3083	<u>0.4489</u>	0.2345	0.0491
2 - 9	-0.0394	<u>0.3880</u>	-0.0330	0.0852
2 - 10	-0.0743	0.2188	-0.1749	<u>0.5897</u>
2 - 11	0.1162	-0.1089	<u>0.4279</u>	-0.1533
2 - 12	-0.3118	0.4116	<u>0.3862</u>	0.1113
2 - 13	-0.0073	0.0069	0.2096	-0.0481



Appendix G

Additional Topics Listed by Respondents
for Workshops, Seminars, and Similar Presentations

- Developing performance objectives.
- Developing better faculty-administration communication.
- Interdisciplinary discussions (e.g., around Ascent of Man--TV program).
- Colloquium on importance of teaching on this campus--especially its impact on merit, promotion, and tenure.
- Role of private Christian education.
- Workshops dealing with career planning for faculty and students, as well as alternative roles in the classroom.
- Workshops dealing with such institutional practices as the budgeting system.
- Teaching assistant orientation--all day workshop.
- Teaching the nontraditional or high risk student.
- Faculty retreat to consider learning theory and teaching practice.
- In-service training course in group dynamics (sensitivity training).
- To improve lecturing and discussion questioning techniques.
- To help students with writing.
- Workshop for freshman and sophomore advisors.
- Teaching methods workshops: (1) Keller Method (PSI); (2) Contract-Teaching; (3) Using Discussion Effectively.
- Program in faculty spiritual development.
- Retreats for departments and divisions to discuss methods pertinent to academic unit (e.g., The Division of Natural Sciences

END

compared approaches to laboratory instruction by different departments).

On the use of audiovisuals.

Summer workshops in course development for staff in team taught courses.

Local symposium on recent developments in a field, usually conducted at departmental level.

Competency based education workshop.

Assessing experiential learning.

Computer assisted instruction.

Grant writing.

Full faculty conference with a professional conference leader to confront curriculum and educational goal issues in areas of internal conflict.

END