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Teaching Computer Science
in a Collegiate Setting

A Dissertation Submitted to the Graduate Faculty of
Baylor University
in Partial Fulfillment of the
Requirements for the Degree
of
Doctor of Education

By
Paula Price Tanner

Waco, Texas

May 2003

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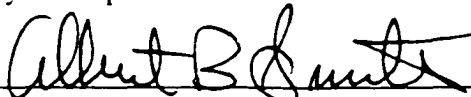
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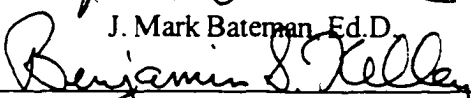
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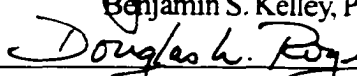

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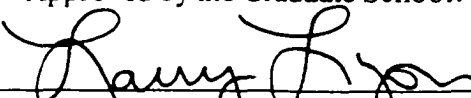

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ABSTRACT

Teaching Computer Science in a Collegiate Setting

Paula Price Tanner

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Faced with a growing demand for computer science classes and a shortage of new computer science Ph.D.s choosing to remain in academia, college administrators often must look to business and industry to recruit qualified professionals for their faculties. Though it is difficult for administrators to match industry salaries, other aspects of academic life can serve as incentives in the recruiting process—factors such as flexible working conditions, opportunities for research or travel, relative job security, tuition reimbursement, mentoring opportunities, and continuing advancement opportunities for older workers. This study uses data gathered through the National Study of Postsecondary Faculty in 1993 and 1999 to develop a profile of the working conditions of computer science faculty at four-year colleges and universities in the United States.

The “hygiene/motivator” theory of job satisfaction was used as a theoretical framework for this study, which analyzed responses to questions about intrinsic factors, extrinsic factors and demographic factors related to the teaching of computer science in a collegiate setting. The original data set for the two surveys (25,780 responses in 1993 and 18,043 responses in 1999) was filtered to isolate the responses of full-time faculty members at four-year or greater institutions, whose primary activity was teaching “for credit” classes in a computer science field. This brought the final sample size to 202 for 1993 and 145 for the 1999 survey. Analysis of the NSOPF data included use of independent samples t-tests to compare conditions reported at

upper echelon institutions vs. other, smaller colleges and universities; data were also subgrouped by survey year to analyze differences in responses in 1993 and 1999.

Significant differences in salary and work patterns were found between responses from different types of institutions, but all reflected a high degree of satisfaction and security in the work. Results suggested that academic recruiters can and should whenever possible offer candidates a high degree of autonomy, flexible work time, tuition remission, and institutional support for professional growth through travel, continued training, professional organizations, and sabbaticals, because these factors can have a strong appeal to computer science professionals who are considering a move to academia.

TABLE OF CONTENTS

	Page
List of Tables	v
Acknowledgments	xxx
Chapter One: Introduction	1
Statement of the Problem	3
Purpose of the Study	3
Research Questions	3
Design of the Study	5
Significance of the Study	6
Limitations	7
Definitions	8
Basic Assumptions	8
Data Collection	9
Delimitations	9
Selection of the Sample	10
Data Analysis	12
Summary	12
Chapter Two: Review of Related Literature	13
Theoretical Literature	13
Empirical Literature	19
Summary	28
Chapter Three: Methodology	29
Introduction	29
Survey Design and Response Rates	29

Accuracy of Estimates	31
Study Sample	32
Data Alignment	34
Statistical Procedures	38
Summary	40
Chapter Four: Analysis and Findings	42
Introduction	42
Intrinsic Factors	43
Extrinsic Factors	45
Demographic Factors	48
Type of Institution	215
Year of Survey	222
Summary	227
Chapter Five: Conclusions and Recommendations	230
Introduction	230
Major Findings and Conclusions	230
Implications for Policy, Practice, and Theory	249
Recommendations for Further Research	251
Summary	253
Appendices	254
Appendix A: Identification Codes and Questionnaire Wording	255
Appendix B: NSOPF:93 Faculty Questionnaire	273
Appendix C: NSOPF:99 Faculty Questionnaire	301
Appendix D: Approval of Human Subjects Committee	331
Appendix E: Independent t-Test Results, Comparing Types of Institutions	334
Appendix F: Independent t-Test Results, Comparing 1993 and 1999	403
Bibliography	462

LIST OF TABLES

	Page
Table 1. Information Matrix for Current Study	6
Table 2. Nine-month Salaries, U.S. Computer Science Departments	27
Table 3. Hours Per Week Paid Activities at Institution	50
Table 4. Hours Per Week Unpaid Activities at Institution	51
Table 5. Hours Per Week Paid Activities Not at Institution	51
Table 6. Hours Per Week Unpaid Activity Not at Institution	52
Table 7. Time Actually Spent Teaching	53
Table 8. Time Actually Spent at Research	54
Table 9. Time Actually Spent on Professional Growth	55
Table 10. Time Actually Spent at Administration	56
Table 11. Time Actually Spent on Service Activity	57
Table 12. Time Actually Spent on Consulting	57
Table 13. Time Preferred at Teaching	58
Table 14. Time Preferred at Research	60
Table 15. Time Preferred on Professional Growth	61
Table 16. Time Preferred at Administration	62
Table 17. Time Preferred on Service Activity	62
Table 18. Time Preferred on Consulting	63
Table 19. Number of Undergraduate Committees Served On	64
Table 20. Number of Graduate Committees Served On	64
Table 21. Number of Undergraduate Committees Chaired	65
Table 22. Number of Graduate Committees Chaired	65
Table 23. Total Classes Taught	66
Table 24. Total Courses Taught	66

Table 25. Remedial Classes Taught	67
Table 26. Continuing Education Classes Taught	67
Table 27. Total Office Hours Per Week	68
Table 28. Any Creative Work / Writing / Research	68
Table 29. Type of Primary Work / Writing / Research	69
Table 30. Any Funded Research	69
Table 31. Principal Investigator / Co-Principal Investigator on Grants	69
Table 32. Receive Institutional Funds for Tuition Remission	70
Table 33. Receive Institutional Funds for Professional Association	70
Table 34. Receive Institutional Funds for Professional Travel	70
Table 35. Receive Institutional Funds for Training	71
Table 36. Receive Institutional Funds for Sabbatical Leave	71
Table 37. Satisfaction with Authority to Decide Course Content	71
Table 38. Satisfaction with Authority to Decide Courses Taught	72
Table 39. Satisfaction with Authority to Make Other Job Decisions	72
Table 40. Satisfaction with Time Available to Advise Students	72
Table 41. Satisfaction with Quality of Undergraduate Students	73
Table 42. Satisfaction with Quality of Graduate Students	73
Table 43. Satisfaction with Workload	73
Table 44. Satisfaction with Advancement Opportunities	74
Table 45. Satisfaction with Time to Keep Current in Field	74
Table 46. Satisfaction with Freedom to Do Consulting	74
Table 47. Satisfaction with Job Overall	75
Table 48. How Important Advancement Opportunities?	75
Table 49. How Important No Pressure to Publish?	75
Table 50. How Important Increased Opportunities to Teach?	75
Table 51. How Important Increased Opportunities to Do Research?	76
Table 52. Academic Rank, Title, or Job	76

Table 53. Tenure Status	76
Table 54. Duration of Contract.....	77
Table 55. Number of Years in Current Job.....	77
Table 56. Positions in Higher Education During Career	78
Table 57. Years Teaching in Higher Education Institutions	79
Table 58. Employed Only at This Institution	80
Table 59. Other Employment in Year of Survey.....	80
Table 60. Rating of Research Equipment, Instruments	80
Table 61. Rating of Laboratory Space, Supplies	81
Table 62. Rating of Availability of Research Assistants	81
Table 63. Rating of Computers and Local Networks	81
Table 64. Rating of Centralized Computer Facilities	82
Table 65. Rating of Internet Connections	82
Table 66. Rating of Audio-visual Equipment.....	82
Table 67. Rating of Classroom Space.....	83
Table 68. Rating of Office Space	83
Table 69. Rating of Secretarial Support	83
Table 70. Rating of Library Holdings	84
Table 71. Satisfaction with Job Security.....	84
Table 72. Satisfaction with Salary	84
Table 73. Satisfaction with Benefits	85
Table 74. Satisfaction with Employment Opportunities for Spouse.....	85
Table 75. How Important Salary Level?	85
Table 76. How Important Tenure?	86
Table 77. How Important Job Security?	86
Table 78. How Important Benefits?	86
Table 79. How Important Research Facilities?	86
Table 80. How Important Instructional Facilities?	87

Table 81. How Important Employment Opportunities for Spouse?	87
Table 82. How Important Geographic Location?	87
Table 83. How Important Good Schools for Children?	87
Table 84. Total Income from Institution	88
Table 85. Total Income, All Sources	88
Table 86. Total Household Income	89
Table 87. Highest Degree Type	89
Table 88. Highest Degree Field	90
Table 89. Gender	90
Table 90. Age	90
Table 91. Race/Ethnicity	91
Table 92. Marital Status	91
Table 93. Spouse Employed in Higher Education	91
Table 94. Country of Birth	92
Table 95. Citizenship Status	92
Table 96. How Likely a Part-time Job at Another Postsecondary Institution?	92
Table 97. How Likely a Full-time Job at Another Postsecondary Institution?	93
Table 98. How Likely a Part-time Job, Not at Postsecondary Institution?	93
Table 99. How Likely a Full-time Job, Not at Postsecondary Institution?	93
Table 100. How Likely to Retire in Next Three Years?	94
Table 101. Age Most Likely to Stop Working at Postsecondary Institution	94
Table 102. Retire and Work Part-time at Current Institution?	95
Table 103. Retired from Another Position	95
Table 104. Would You Take Early Retirement?	95
Table 105. Age Likely to Retire from All Paid Employment	96
Table 106. Decision to Leave: Most Important Factor	97
Table 107A. Hours Per Week Paid Activities at Institution--1993	98
Table 107B. Hours Per Week Paid Activities at Institution--1999	98

Table 108A. Hours Per Week Unpaid Activities at Institution--1993	99
Table 108B. Hours Per Week Unpaid Activities at Institution--1999	99
Table 109A. Hours Per Week Paid Activities Not at Institution--1993	100
Table 109B. Hours Per Week Paid Activities Not at Institution--1999	100
Table 110A. Hours Per Week Unpaid Activity Not at Institution--1993	101
Table 110B. Hours Per Week Unpaid Activity Not at Institution--1999	101
Table 111A. Time Actually Spent Teaching--1993	102
Table 111B. Time Actually Spent Teaching--1999	102
Table 112A. Time Actually Spent at Research--1993	103
Table 112B. Time Actually Spent at Research--1999	104
Table 113A. Time Actually Spent on Professional Growth--1993	105
Table 113B. Time Actually Spent on Professional Growth--1999	105
Table 114A. Time Actually Spent at Administration--1993	106
Table 114B. Time Actually Spent at Administration--1999	107
Table 115A. Time Actually Spent on Service Activity--1993	108
Table 115B. Time Actually Spent on Service Activity--1999	108
Table 116A. Time Actually Spent on Consulting--1993	109
Table 116B. Time Actually Spent on Consulting--1999	110
Table 117A. Time Preferred at Teaching--1993	111
Table 117B. Time Preferred at Teaching--1999	112
Table 118A. Time Preferred at Research--1993	113
Table 118B. Time Preferred at Research--1999	114
Table 119A. Time Preferred on Professional Growth--1993	115
Table 119B. Time Preferred on Professional Growth--1999	115
Table 120A. Time Preferred at Administration--1993	116
Table 120B. Time Preferred at Administration--1999	116
Table 121A. Time Preferred on Service Activity--1993	117
Table 121B. Time Preferred on Service Activity--1999	117

Table 122A. Time Preferred on Consulting--1993	118
Table 122B. Time Preferred on Consulting--1999	118
Table 123A. Number of Undergraduate Committees Served On--1993	119
Table 123B. Number of Undergraduate Committees Served On--1999	120
Table 124A. Number of Graduate Committees Served On--1993	121
Table 124B. Number of Graduate Committees Served On--1999	122
Table 125A. Number of Undergraduate Committees Chaired--1993	123
Table 125B. Number of Undergraduate Committees Chaired--1999	123
Table 126A. Number of Graduate Committees Chaired--1993	124
Table 126B. Number of Graduate Committees Chaired--1999	125
Table 127A. Total Classes Taught--1993	126
Table 127B. Total Classes Taught--1999	127
Table 128. Total Courses Taught--1999	128
Table 129. Remedial Classes Taught--1999	129
Table 130 Continuing Education Classes Taught--1999	129
Table 131A. Total Office Hours Per Week--1993	130
Table 131B. Total Office Hours Per Week--1999	131
Table 132A. Any Creative Work / Writing / Research--1993	132
Table 132B. Any Creative Work / Writing / Research--1999	132
Table 133A. Type of Primary Work / Writing / Research--1993	133
Table 133B. Type of Primary Work / Writing / Research--1999	134
Table 134A. Any Funded Research--1993	135
Table 134B. Any Funded Research--1999	135
Table 135A. Principal Investigator / Co-Principal Investigator--1993	136
Table 135B. Principal Investigator / Co-Principal Investigator--1999	136
Table 136A. Receive Institutional Funds for Tuition Remission--1993	137
Table 136B. Receive Institutional Funds for Tuition Remission--1999	137
Table 137A. Receive Institutional Funds for Professional Association--1993	138

Table 137B. Receive Institutional Funds for Professional Association--1999	138
Table 138A. Receive Institutional Funds for Professional Travel--1993	139
Table 138B. Receive Institutional Funds for Professional Travel--1999	139
Table 139A. Receive Institutional Funds for Training--1993	140
Table 139B. Receive Institutional Funds for Training--1999	140
Table 140A. Receive Institutional Funds for Sabbatical Leave--1993	141
Table 140B. Receive Institutional Funds for Sabbatical Leave--1999	141
Table 141A. Satisfaction with Authority to Decide Course Content--1993	142
Table 141B. Satisfaction with Authority to Decide Course Content--1999	142
Table 142A. Satisfaction with Authority to Decide Courses Taught--1993	143
Table 142B. Satisfaction with Authority to Decide Courses Taught--1999	143
Table 143A. Satisfaction with Authority to Make Other Job Decisions--1993	144
Table 143B. Satisfaction with Authority to Make Other Job Decisions--1999	144
Table 144A. Satisfaction with Time Available to Advise Students--1993	145
Table 144B. Satisfaction with Time Available to Advise Students--1999	145
Table 145A. Satisfaction with Quality of Undergraduate Students--1993	146
Table 145B. Satisfaction with Quality of Undergraduate Students--1999	146
Table 146A. Satisfaction with Quality of Graduate Students--1993	147
Table 146B. Satisfaction with Quality of Graduate Students--1999	147
Table 147A. Satisfaction with Workload--1993	148
Table 147B. Satisfaction with Workload--1999	148
Table 148A. Satisfaction with Advancement Opportunities--1993	149
Table 148B. Satisfaction with Advancement Opportunities--1999	149
Table 149A. Satisfaction with Time to Keep Current in Field--1993	150
Table 149B. Satisfaction with Time to Keep Current in Field--1999	150
Table 150A. Satisfaction with Freedom to Do Consulting--1993	151
Table 150B. Satisfaction with Freedom to Do Consulting--1999	151
Table 151A. Satisfaction with Job Overall--1993	152

Table 151B. Satisfaction with Job Overall--1999	152
Table 152A. How Important Advancement Opportunities?--1993	153
Table 152B. How Important Advancement Opportunities?--1999	153
Table 153A. How Important No Pressure to Publish?--1993	154
Table 153B. How Important No Pressure to Publish?--1999	154
Table 154A. How Important Increased Opportunities to Teach?--1993	155
Table 154B. How Important Increased Opportunities to Teach?--1999	155
Table 155A. How Important Increased Opportunities to Do Research?--1993	156
Table 155B. How Important Increased Opportunities to Do Research?--1999	156
Table 156A. Academic Rank, Title, or Job--1993	157
Table 156B. Academic Rank, Title, or Job--1999	157
Table 157A. Tenure Status--1993	158
Table 157B. Tenure Status--1999	158
Table 158A. Duration of Contract--1993	159
Table 158B. Duration of Contract--1999	160
Table 159A. Number of Years in Current Job--1993	161
Table 159B. Number of Years in Current Job--1999	161
Table 160. Positions in Higher Education During Career--1999	162
Table 161. Years Teaching in Higher Education Institutions	162
Table 162A. Employed Only at This Institution--1993	163
Table 162B. Employed Only at This Institution--1999	163
Table 163A. Other Employment in Year of Survey--1993	164
Table 163B. Other Employment in Year of Survey--1999	164
Table 164A. Rating of Research Equipment, Instruments--1993	165
Table 164B. Rating of Research Equipment, Instruments--1999	165
Table 165A. Rating of Laboratory Space, Supplies--1993	166
Table 165B. Rating of Laboratory Space, Supplies--1999	166
Table 166A. Rating of Availability of Research Assistants--1993	167

Table 166B. Rating of Availability of Research Assistants--1999	167
Table 167A. Rating of Computers and Local Networks--1993	168
Table 167B. Rating of Computers and Local Networks--1999	168
Table 168A. Rating of Centralized Computer Facilities--1993	169
Table 168B. Rating of Centralized Computer Facilities--1999	169
Table 169A. Rating of Internet Connections--1993	170
Table 169B. Rating of Internet Connections--1999	170
Table 170A. Rating of Audio-visual Equipment--1993	171
Table 170B. Rating of Audio-visual Equipment--1999	171
Table 171A. Rating of Classroom Space--1993	172
Table 171B. Rating of Classroom Space--1999	172
Table 172A. Rating of Office Space--1993	173
Table 172B. Rating of Office Space--1999	173
Table 173A. Rating of Secretarial Support--1993	174
Table 173B. Rating of Secretarial Support--1999	174
Table 174A. Rating of Library Holdings--1993	175
Table 174B. Rating of Library Holdings--1999	175
Table 175A. Satisfaction with Job Security--1993	176
Table 175B. Satisfaction with Job Security--1999	176
Table 176A. Satisfaction with Salary--1993	177
Table 176B. Satisfaction with Salary--1999	177
Table 177A. Satisfaction with Benefits--1993	178
Table 177B. Satisfaction with Benefits--1999	178
Table 178A. Satisfaction with Job Opportunities for Spouse--1993	179
Table 178B. Satisfaction with Job Opportunities for Spouse--1999	179
Table 179A. How Important Salary Level?--1993	180
Table 179B. How Important Salary Level?--1999	180
Table 180A. How Important Tenure?--1993	181

Table 180B. How Important Tenure?--1999	181
Table 181A. How Important Job Security?--1993	182
Table 181B. How Important Job Security?--1999	182
Table 182A. How Important Benefits?--1993	183
Table 182B. How Important Benefits?--1999	183
Table 183A. How Important Research Facilities?--1993	184
Table 183B. How Important Research Facilities?--1999	184
Table 184A. How Important Instructional Facilities?--1993	185
Table 184B. How Important Instructional Facilities?--1999	185
Table 185A. How Important Job Opportunities for Spouse?--1993	186
Table 185B. How Important Job Opportunities for Spouse?--1999	186
Table 186A. How Important Geographic Location?--1993	187
Table 186B. How Important Geographic Location?--1999	187
Table 187A. How Important Good Schools for Children?--1993	188
Table 187B. How Important Good Schools for Children?--1999	188
Table 188A. Total Income from Institution--1993	189
Table 188B. Total Income from Institution--1999	190
Table 189A. Total Income. All Sources--1993	191
Table 189B. Total Income. All Sources--1999	192
Table 190A. Total Household Income--1993	193
Table 190B. Total Household Income--1999	194
Table 191A. Highest Degree Type--1993	195
Table 191B. Highest Degree Type--1999	195
Table 192A. Highest Degree Field--1993	196
Table 192B. Highest Degree Field--1999	197
Table 193A. Gender--1993	198
Table 193B. Gender--1999	198
Table 194A. Age--1993	199

Table 194B. Age--1999	199
Table 195A. Race/Ethnicity--1993	200
Table 195B. Race/Ethnicity--1999	200
Table 196A. Marital Status--1993	201
Table 196B. Marital Status--1999	201
Table 197. Spouse Employed in Higher Education--1999	202
Table 198A. Country of Birth--1993	202
Table 198B. Country of Birth--1999	203
Table 199A. Citizenship Status--1993	203
Table 199B. Citizenship Status--1999	204
Table 200A. How Likely a Part-time Job at Another Postsecondary?--1993	205
Table 200B. How Likely a Part-time Job at Another Postsecondary ?--1999	205
Table 201A. How Likely a Full-time Job at Another Postsecondary?--1993	206
Table 201B. How Likely a Full-time Job at Another Postsecondary?--1999	206
Table 202A. How Likely a Part-time Job, Not at Postsecondary?--1993	207
Table 202B. How Likely a Part-time Job, Not at Postsecondary?--1999	207
Table 203A. How Likely a Full-time Job, Not at Postsecondary?--1993	208
Table 203B. How Likely a Full-time Job, Not at Postsecondary?--1999	208
Table 204A. How Likely to Retire in Next Three Years?--1993	209
Table 204B. How Likely to Retire in Next Three Years?--1999	209
Table 205A. Age Most Likely to Stop Working at Postsecondary--1993	210
Table 205B. Age Most Likely to Stop Working at Postsecondary--1999	210
Table 206A. Retire and Work Part-time at Current Institution?--1993	211
Table 206B. Retire and Work Part-time at Current Institution?--1999	211
Table 207. Retired from Another Position--1999	211
Table 208A. Would You Take Early Retirement?--1993	212
Table 208B. Would You Take Early Retirement?--1999	212
Table 209A. Age Likely to Retire from All Paid Employment--1993	213

Table 209B. Age Likely to Retire from All Paid Employment--1999	213
Table 210. Decision to Leave: Most Important Factor--1999	214
Table 211. Significant Differences in Means, Comparisons by Type of Institution	217
Table 212. Significant Differences in Means, Comparisons by Year of Survey	223
Table E.1. Intrinsic Factors: Means Comparisons, Research vs. Doctoral	334
Table E.2. Extrinsic Factors: Means Comparisons, Research vs. Doctoral	337
Table E.3. Demographic Factors: Means Comparisons, Research vs. Doctoral	339
Table E.4a. Hours Per Week Paid Activities at Institution	340
Table E.4b. Hours Per Week Paid Activities at Institution	340
Table E.5a. Hours Per Week Unpaid Activities at Institution	340
Table E.5b. Hours Per Week Unpaid Activities at Institution	341
Table E.6a. Hours Per Week Paid Activities Not at Institution	341
Table E.6b. Hours Per Week Paid Activities Not at Institution	341
Table E.7a. Hours Per Week Unpaid Activity Not at Institution	342
Table E.7b. Hours Per Week Unpaid Activity Not at Institution	342
Table E.8a. Time Actually Spent Teaching	342
Table E.8b. Time Actually Spent Teaching	343
Table E.9a. Time Actually Spent at Research	343
Table E.9b. Time Actually Spent at Research	343
Table E.10a. Time Actually Spent on Professional Growth	344
Table E.10b. Time Actually Spent on Professional Growth	344
Table E.11a. Time Actually Spent at Administration	344
Table E.11b. Time Actually Spent at Administration	345
Table E.12a. Time Actually Spent on Service Activity	345
Table E.12b. Time Actually Spent on Service Activity	345
Table E.13a. Time Actually Spent on Consulting	346
Table E.13b. Time Actually Spent on Consulting	346
Table E.14a. Time Preferred at Teaching	346

Table E.14b. Time Preferred at Teaching	347
Table E.15a. Time Preferred at Research	347
Table E.15b. Time Preferred at Research	347
Table E.16a. Time Preferred on Professional Growth	348
Table E.16b. Time Preferred on Professional Growth	348
Table E.17a. Time Preferred at Administration	348
Table E.17b. Time Preferred at Administration	349
Table E.18a. Time Preferred on Service Activity	349
Table E.18b. Time Preferred on Service Activity	349
Table E.19a. Time Preferred on Consulting	350
Table E.19b. Time Preferred on Consulting	350
Table E.20a. Number of Undergraduate Committees Served On	350
Table E.20b. Number of Undergraduate Committees Served On	351
Table E.21a. Number of Graduate Committees Served On	351
Table E.21b. Number of Graduate Committees Served On	351
Table E.22a. Number of Undergraduate Committees Chaired	352
Table E.22b. Number of Undergraduate Committees Chaired	352
Table E.23a. Number of Graduate Committees Chaired	352
Table E.23b. Number of Graduate Committees Chaired	353
Table E.24a. Total Classes Taught	353
Table E.24b. Total Classes Taught.	353
Table E.25a. Total Courses Taught	354
Table E.25b. Total Courses Taught.	354
Table E.26a. Remedial Classes Taught	354
Table E.26b. Remedial Classes Taught	355
Table E.27a. Continuing Education Classes Taught	355
Table E.27b. Continuing Education Classes Taught	355
Table E.28a. Total Office Hours Per Week	356

Table E.28b. Total Office Hours Per Week	356
Table E.29a. Any Creative Work / Writing / Research	356
Table E.29b. Any Creative Work / Writing / Research	357
Table E.30a. Any Funded Research	357
Table E.30b. Any Funded Research	357
Table E.31a. Principal Investigator / Co-Principal Investigator on Grants	358
Table E.31b. Principal Investigator / Co-Principal Investigator on Grants	358
Table E.32a. Receive Institutional Funds for Tuition Remission	358
Table E.32b. Receive Institutional Funds for Tuition Remission	359
Table E.33a. Receive Institutional Funds for Professional Association	359
Table E.33b. Receive Institutional Funds for Professional Association	359
Table E.34a. Receive Institutional Funds for Professional Travel	360
Table E.34b. Receive Institutional Funds for Professional Travel	360
Table E.35a. Receive Institutional Funds for Training	360
Table E.35b. Receive Institutional Funds for Training	361
Table E.36a. Receive Institutional Funds for Sabbatical Leave	361
Table E.36b. Receive Institutional Funds for Sabbatical Leave	361
Table E.37a. Satisfaction with Authority to Decide Course Content	362
Table E.37b. Satisfaction with Authority to Decide Course Content	362
Table E.38a. Satisfaction with Authority to Decide Courses Taught	362
Table E.38b. Satisfaction with Authority to Decide Courses Taught	363
Table E.39a. Satisfaction with Authority to Make Other Job Decisions	363
Table E.39b. Satisfaction with Authority to Make Other Job Decisions	363
Table E.40a. Satisfaction with Time Available to Advise Students	364
Table E.40b. Satisfaction with Time Available to Advise Students	364
Table E.41a. Satisfaction with Quality of Undergraduate Students	364
Table E.41b. Satisfaction with Quality of Undergraduate Students	365
Table E.42a. Satisfaction with Quality of Graduate Students	365

Table E.42b. Satisfaction with Quality of Graduate Students	365
Table E.43a. Satisfaction with Workload	366
Table E.43b. Satisfaction with Workload	366
Table E.44a. Satisfaction with Advancement Opportunities	366
Table E.44b. Satisfaction with Advancement Opportunities	367
Table E.45a. Satisfaction with Time to Keep Current in Field	367
Table E.45b. Satisfaction with Time to Keep Current in Field	367
Table E.46a. Satisfaction with Freedom to Do Consulting	368
Table E.46b. Satisfaction with Freedom to Do Consulting	368
Table E.47a. Satisfaction with Job Overall	368
Table E.47b. Satisfaction with Job Overall	369
Table E.48a. How Important Advancement Opportunities?	369
Table E.48b. How Important Advancement Opportunities?	369
Table E.49a. How Important No Pressure to Publish?	370
Table E.49b. How Important No Pressure to Publish?	370
Table E.50a. How Important Increased Opportunities to Teach?	370
Table E.50b. How Important Increased Opportunities to Teach?	371
Table E.51a. How Important Increased Opportunities to Do Research?	371
Table E.51b. How Important Increased Opportunities to Do Research?	371
Table E.52a. Academic Rank, Title, or Job	372
Table E.52b. Academic Rank, Title, or Job	372
Table E.53a. Number of Years in Current Job	372
Table E.53b. Number of Years in Current Job	373
Table E.54a. Years Teaching in Higher Education Institutions	373
Table E.54b. Years Teaching in Higher Education Institutions	373
Table E.55a. Employed Only at This Institution	374
Table E.55b. Employed Only at This Institution	374
Table E.56a. Other Employment in Year of Survey	374

Table E.56b. Other Employment in Year of Survey	375
Table E.57a. Rating of Research Equipment, Instruments	375
Table E.57b. Rating of Research Equipment, Instruments	375
Table E.58a. Rating of Laboratory Space, Supplies	376
Table E.58b. Rating of Laboratory Space, Supplies	376
Table E.59a. Rating of Availability of Research Assistants	376
Table E.59b. Rating of Availability of Research Assistants	377
Table E.60a. Rating of Computers and Local Networks	377
Table E.60b. Rating of Computers and Local Networks	377
Table E.61a. Rating of Centralized Computer Facilities	378
Table E.61b. Rating of Centralized Computer Facilities	378
Table E.62a. Rating of Internet Connections	378
Table E.62b. Rating of Internet Connections	379
Table E.63a. Rating of Audio-visual Equipment	379
Table E.63b. Rating of Audio-visual Equipment	379
Table E.64a. Rating of Classroom Space	380
Table E.64b. Rating of Classroom Space	380
Table E.65a. Rating of Office Space	380
Table E.65b. Rating of Office Space	381
Table E.66a. Rating of Secretarial Support	381
Table E.66b. Rating of Secretarial Support	381
Table E.67a. Rating of Library Holdings	382
Table E.67b. Rating of Library Holdings	382
Table E.68a. Satisfaction with Job Security	382
Table E.68b. Satisfaction with Job Security	383
Table E.69a. Satisfaction with Salary	383
Table E.69b. Satisfaction with Salary	383
Table E.70a. Satisfaction with Benefits	384

Table E.70b. Satisfaction with Benefits	384
Table E.71a. Satisfaction with Job Opportunities for Spouse	384
Table E.71b. Satisfaction with Job Opportunities for Spouse	385
Table E.72a. How Important Salary Level?	385
Table E.72b. How Important Salary Level?	385
Table E.73a. How Important Tenure?	386
Table E.73b. How Important Tenure?	386
Table E.74a. How Important Job Security?	386
Table E.74b. How Important Job Security?	387
Table E.75a. How Important Benefits?	387
Table E.75b. How Important Benefits?	387
Table E.76a. How Important Research Facilities?	388
Table E.76b. How Important Research Facilities?	388
Table E.77a. How Important Instructional Facilities?	388
Table E.77b. How Important Instructional Facilities?	389
Table E.78a. How Important Job Opportunities for Spouse?	389
Table E.78b. How Important Job Opportunities for Spouse?	389
Table E.79a. How Important Geographic Location?	390
Table E.79b. How Important Geographic Location?	390
Table E.80a. How Important Good Schools for Children?	390
Table E.80b. How Important Good Schools for Children?	391
Table E.81a. Total Income from Institution	391
Table E.81b. Total Income from Institution	391
Table E.82a. Total Income, All Sources	392
Table E.82b. Total Income, All Sources	392
Table E.83a. Total Household Income	392
Table E.83b. Total Household Income	393
Table E.84a. Gender	393

Table E.84b. Gender	393
Table E.85a. Age	394
Table E.85b. Age	394
Table E.86a. Spouse Employed in Higher Education	394
Table E.86b. Spouse Employed in Higher Education	395
Table E.87a. Country of Birth	395
Table E.87b. Country of Birth	395
Table E.88a. Citizenship Status	395
Table E.88b. Citizenship Status	396
Table E.89a. How Likely a Part-time Job at Another Postsecondary?	396
Table E.89b. How Likely a Part-time Job at Another Postsecondary?	396
Table E.90a. How Likely a Full-time Job at Another Postsecondary?	397
Table E.90b. How Likely a Full-time Job at Another Postsecondary?	397
Table E.91a. How Likely a Part-time Job, Not at Postsecondary?	397
Table E.91b. How Likely a Part-time Job, Not at Postsecondary?	398
Table E.92a. How Likely a Full-time Job, Not at Postsecondary?	398
Table E.92b. How Likely a Full-time Job, Not at Postsecondary?	398
Table E.93a. How Likely to Retire in Next Three Years?	399
Table E.93b. How Likely to Retire in Next Three Years?	399
Table E.94a. Age Most Likely to Stop Working at Postsecondary	399
Table E.94b. Age Most Likely to Stop Working at Postsecondary	400
Table E.95a. Retire and Work Part-time at Current Institution?	400
Table E.95b. Retire and Work Part-time at Current Institution?	400
Table E.96a. Retired from Another Position	401
Table E.96b. Retired from Another Position	401
Table E.97a. Would You Take Early Retirement?	401
Table E.97b. Would You Take Early Retirement?	402
Table E.98a. Age Likely to Retire from All Paid Employment	402

Table E.98b. Age Likely to Retire from All Paid Employment	402
Table F.1a. Hours Per Week Paid Activities at Institution	403
Table F.1b. Hours Per Week Paid Activities at Institution	403
Table F.2a. Hours Per Week Unpaid Activities at Institution	403
Table F.2b. Hours Per Week Unpaid Activities at Institution	404
Table F.3a. Hours Per Week Paid Activities Not at Institution	404
Table F.3b. Hours Per Week Paid Activities Not at Institution	404
Table F.4a. Hours Per Week Unpaid Activity Not at Institution	405
Table F.4b. Hours Per Week Unpaid Activity Not at Institution	405
Table F.5a. Time Actually Spent Teaching	405
Table F.5b. Time Actually Spent Teaching	406
Table F.6a. Time Actually Spent at Research	406
Table F.6b. Time Actually Spent at Research	406
Table F.7a. Time Actually Spent on Professional Growth	407
Table F.7b. Time Actually Spent on Professional Growth	407
Table F.8a. Time Actually Spent at Administration	407
Table F.8b. Time Actually Spent at Administration	408
Table F.9a. Time Actually Spent on Service Activity	408
Table F.9b. Time Actually Spent on Service Activity	408
Table F.10a. Time Actually Spent on Consulting	409
Table F.10b. Time Actually Spent on Consulting	409
Table F.11a. Time Preferred at Teaching	409
Table F.11b. Time Preferred at Teaching	410
Table F.12a. Time Preferred at Research	410
Table F.12b. Time Preferred at Research	410
Table F.13a. Time Preferred on Professional Growth	411
Table F.13b. Time Preferred on Professional Growth	411
Table F.14a. Time Preferred at Administration	411

Table F.14b. Time Preferred at Administration	412
Table F.15a. Time Preferred on Service Activity	412
Table F.15b. Time Preferred on Service Activity	412
Table F.16a. Time Preferred on Consulting	413
Table F.16b. Time Preferred on Consulting	413
Table F.17a. Number of Undergraduate Committees Served On	413
Table F.17b. Number of Undergraduate Committees Served On	414
Table F.18a. Number of Graduate Committees Served On	414
Table F.18b. Number of Graduate Committees Served On	414
Table F.19a. Number of Undergraduate Committees Chaired	415
Table F.19b. Number of Undergraduate Committees Chaired	415
Table F.20a. Number of Graduate Committees Chaired	415
Table F.20b. Number of Graduate Committees Chaired	416
Table F.21a. Total Classes Taught	416
Table F.21b. Total Classes Taught	416
Table F.22a. Total Office Hours Per Week	417
Table F.22b. Total Office Hours Per Week	417
Table F.23a. Any Creative Work / Writing / Research	417
Table F.23b. Any Creative Work / Writing / Research	418
Table F.24a. Any Funded Research	418
Table F.24b. Any Funded Research	418
Table F.25a. Principal Investigator / Co-Principal Investigator on Grants	419
Table F.25b. Principal Investigator / Co-Principal Investigator on Grants	419
Table F.26a. Receive Institutional Funds for Tuition Remission	419
Table F.26b. Receive Institutional Funds for Tuition Remission	420
Table F.27a. Receive Institutional Funds for Professional Association	420
Table F.27b. Receive Institutional Funds for Professional Association	420
Table F.28a. Receive Institutional Funds for Professional Travel	421

Table F.28b. Receive Institutional Funds for Professional Travel	421
Table F.29a. Receive Institutional Funds for Training	421
Table F.29b. Receive Institutional Funds for Training	422
Table F.30a. Receive Institutional Funds for Sabbatical Leave	422
Table F.30b. Receive Institutional Funds for Sabbatical Leave	422
Table F.31a. Satisfaction with Authority to Decide Course Content	423
Table F.31b. Satisfaction with Authority to Decide Course Content	423
Table F.32a. Satisfaction with Authority to Decide Courses Taught	423
Table F.32b. Satisfaction with Authority to Decide Courses Taught	424
Table F.33a. Satisfaction with Authority to Make Other Job Decisions	424
Table F.33b. Satisfaction with Authority to Make Other Job Decisions	424
Table F.34a. Satisfaction with Time Available to Advise Students	425
Table F.34b. Satisfaction with Time Available to Advise Students	425
Table F.35a. Satisfaction with Quality of Undergraduate Students	425
Table F.35b. Satisfaction with Quality of Undergraduate Students	426
Table F.36a. Satisfaction with Quality of Graduate Students	426
Table F.36b. Satisfaction with Quality of Graduate Students	426
Table F.37a. Satisfaction with Workload	427
Table F.37b. Satisfaction with Workload	427
Table F.38a. Satisfaction with Advancement Opportunities	427
Table F.38b. Satisfaction with Advancement Opportunities	428
Table F.39a. Satisfaction with Time to Keep Current in Field	428
Table F.39b. Satisfaction with Time to Keep Current in Field	428
Table F.40a. Satisfaction with Freedom to Do Consulting	429
Table F.40b. Satisfaction with Freedom to Do Consulting	429
Table F.41a. Satisfaction with Job Overall	429
Table F.41b. Satisfaction with Job Overall	430
Table F.42a. How Important Advancement Opportunities?	430

Table F.42b. How Important Advancement Opportunities?	430
Table F.43a. How Important No Pressure to Publish?	431
Table F.43b. How Important No Pressure to Publish?	431
Table F.44a. How Important Increased Opportunities to Teach?	431
Table F.44b. How Important Increased Opportunities to Teach?	432
Table F.45a. How Important Increased Opportunities to Do Research?	432
Table F.45b. How Important Increased Opportunities to Do Research?	432
Table F.46a. Academic Rank, Title, or Job	433
Table F.46b. Academic Rank, Title, or Job	433
Table F.47a. Number of Years in Current Job	433
Table F.47b. Number of Years in Current Job	434
Table F.48a. Employed Only at This Institution	434
Table F.48b. Employed Only at This Institution	434
Table F.49a. Other Employment in Year of Survey	435
Table F.49b. Other Employment in Year of Survey	435
Table F.50a. Rating of Research Equipment, Instruments	435
Table F.50b. Rating of Research Equipment, Instruments	436
Table F.51a. Rating of Laboratory Space, Supplies	436
Table F.51b. Rating of Laboratory Space, Supplies	436
Table F.52a. Rating of Availability of Research Assistants	437
Table F.52b. Rating of Availability of Research Assistants	437
Table F.53a. Rating of Computers and Local Networks	437
Table F.53b. Rating of Computers and Local Networks	438
Table F.54a. Rating of Centralized Computer Facilities	438
Table F.54b. Rating of Centralized Computer Facilities	438
Table F.55a. Rating of Internet Connections	439
Table F.55b. Rating of Internet Connections	439
Table F.56a. Rating of Audio-visual Equipment	439

Table F.56b. Rating of Audio-visual Equipment	440
Table F.57a. Rating of Classroom Space	440
Table F.57b. Rating of Classroom Space	440
Table F.58a. Rating of Office Space	441
Table F.58b. Rating of Office Space	441
Table F.59a. Rating of Secretarial Support	441
Table F.59b. Rating of Secretarial Support	442
Table F.60a. Rating of Library Holdings	442
Table F.60b. Rating of Library Holdings	442
Table F.61a. Satisfaction with Job Security	443
Table F.61b. Satisfaction with Job Security	443
Table F.62a. Satisfaction with Salary	443
Table F.62b. Satisfaction with Salary	444
Table F.63a. Satisfaction with Benefits	444
Table F.63b. Satisfaction with Benefits	444
Table F.64a. Satisfaction with Job Opportunities for Spouse	445
Table F.64b. Satisfaction with Job Opportunities for Spouse	445
Table F.65a. How Important Salary Level?	445
Table F.65b. How Important Salary Level?	446
Table F.66a. How Important Tenure?	446
Table F.66b. How Important Tenure?	446
Table F.67a. How Important Job Security?	447
Table F.67b. How Important Job Security?	447
Table F.68a. How Important Benefits?	447
Table F.68b. How Important Benefits?	448
Table F.69a. How Important Research Facilities?	448
Table F.69b. How Important Research Facilities?	448
Table F.70a. How Important Instructional Facilities?	449

Table F.70b. How Important Instructional Facilities?	449
Table F.71a. How Important Job Opportunities for Spouse?	449
Table F.71b. How Important Job Opportunities for Spouse?	450
Table F.72a. How Important Geographic Location?	450
Table F.72b. How Important Geographic Location?	450
Table F.73a. How Important Good Schools for Children?	451
Table F.73b. How Important Good Schools for Children?	451
Table F.74a. Total Income from Institution	451
Table F.74b. Total Income from Institution	452
Table F.75a. Total Income, All Sources	452
Table F.75b. Total Income, All Sources	452
Table F.76a. Total Household Income	453
Table F.76b. Total Household Income	453
Table F.77a. Gender	453
Table F.77b. Gender	454
Table F.78a. Age	454
Table F.78b. Age	454
Table F.79a. Country of Birth	455
Table F.79b. Country of Birth	455
Table F.80a. Citizenship Status	455
Table F.80b. Citizenship Status	456
Table F.81a. How Likely a Part-time Job at Another Postsecondary?	456
Table F.81b. How Likely a Part-time Job at Another Postsecondary?	456
Table F.82a. How Likely a Full-time Job at Another Postsecondary?	457
Table F.82b. How Likely a Full-time Job at Another Postsecondary?	457
Table F.83a. How Likely a Part-time Job, Not at Postsecondary?	457
Table F.83b. How Likely a Part-time Job, Not at Postsecondary?	458
Table F.84a. How Likely a Full-time Job, Not at Postsecondary?	458

Table F.84b. How Likely a Full-time Job, Not at Postsecondary?	458
Table F.85a. How Likely to Retire in Next Three Years?	458
Table F.85b. How Likely to Retire in Next Three Years?	459
Table F.86a. Age Most Likely to Stop Working at Postsecondary	459
Table F.86b. Age Most Likely to Stop Working at Postsecondary	459
Table F.87a. Retire and Work Part-time at Current Institution?	460
Table F.87b. Retire and Work Part-time at Current Institution?	460
Table F.88a. Would You Take Early Retirement?	460
Table F.88b. Would You Take Early Retirement?	461
Table F.89a. Age Likely to Retire from All Paid Employment	461
Table F.89b. Age Likely to Retire from All Paid Employment	461

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CHAPTER ONE

Introduction

For the past decade, higher education administrators have faced a growing dilemma: student demand for undergraduate courses in computer science has steadily outpaced the number of qualified faculty members available to teach those courses. The most recent results of the Computer Research Association's annual Taulbee Survey of Ph.D.-granting departments of computer science and computer engineering confirmed that the current and future Ph.D. output will not satisfy the demand for faculty in the field (Bryant & Vardi, 2002). The survey reported that total enrollments in bachelor's programs continued to rise, increasing 8 percent over the previous year, and enrollment tallies for master's-level students came in at 10 percent over the previous year. At the same time that many universities were predicting additional growth of more than 21 percent over the next two years, the survey found that the number of Ph.D. students produced had barely increased from the ten-year low reported in 2001—and that only 43 percent of the new computer science Ph.D.s were taking jobs in academia. Statistics such as these have led researchers to conclude that “universities will need to look to sources beyond new Ph.D.s and existing faculty to meet their growth targets” (Bryant & Irwin, 2001, p. 7).

Yet higher education administrators who look outside academia for qualified candidates to fill faculty positions usually find it difficult to match the compensation packages those people can earn in business and industry. Although the current information technology workforce is huge (estimated at 2.5 million workers), the demand for these workers continues to increase steadily in most segments of the economy, driving compensation levels up at a faster-than-average pace (Mateyaschuk, 1999; Information Technology Association of America, 2000; Information Technology Association of America, 2001; National Research Council Committee on Workforce Needs in Information Technology, 2001). Real wages for academics, however, are not much different than they were nearly 30 years ago (American Association of University

Professors, 2001). In a recent report on the economic status of the profession, the American Association of University Professors found that “the average faculty member earns roughly 26 percent (\$15,299) less than the average highly educated professional” (American Association of University Professors, 2001). The resulting salary gap leaves many administrators wondering how they can possibly assemble a compensation package that will attract computer science (CS) professionals away from industry and into academe.

In the current climate of cutbacks and economic uncertainty, it is unlikely that administrators would be able to increase faculty salaries significantly, thereby making their openings more attractive to CS professionals in industry. However, literature on job satisfaction suggests that there are many factors beyond salary that can significantly affect a worker’s willingness to accept a job and ability to find satisfaction in it (Maslow, 1954; Herzberg, Mauser & Synderman, 1959; Herzberg, 1969; Locke, 1976; DeVries, 1975; Kalleberg, 1977; McKeachie, 1979; Locke, Fitzpatrick & White, 1983; Waggamon, 1983; Yuker, 1984; Mortimer, Bagshaw & Masland, 1985; Woloshin, 1986; Leslie, 1989; Copur, 1990; Hemmas, Graf & Lust, 1992; Moore & Amey, 1993; Fiorentino, 1999; Lawler, 2000). Researchers in the area of job satisfaction have found that worker autonomy, flexible working conditions, opportunities for research or travel, intellectual property rights, relative job security, tuition reimbursement, comfortable workloads, mentoring opportunities, continuing advancement opportunities for older workers, and many other work conditions can prove to be strong selling points for accepting or remaining in a job.

Certainly computer science teaching positions offer many of these factors, but to date the presence of these factors has not been documented or reviewed in an organized way. (The Taulbee Survey, now in its 31st year, has done an excellent job of documenting the salary levels of computer science faculty across the United States, but it has not examined work conditions beyond salary.) What is needed, then, is a profile of these work conditions, a “big picture” that administrators can use to do a better job of recruiting the qualified professionals they so desperately need to recruit from business and industry.

Statement of the Problem

The problem of this study was the development of a profile of the working conditions of computer science faculty at four-year colleges and universities in the United States during the years from 1993 through 1999.

Purpose of the Study

The purpose of this study was to compile data profiling the work conditions and satisfactions experienced by computer science faculty in higher education. This information had been gathered by the United States Department of Education through its National Study of Postsecondary Faculty (NSOPF), which was administered in 1988, 1993, and 1999; however, the responses of computer science faculty members on those surveys had not, to date, been isolated and analyzed. Due to the design of the NSOPF88, it was not possible to do a post-survey isolation by discipline of the data gathered (U.S. Department of Education National Center for Education Statistics, 1990). Teaching fields could, however, still be identified by specific discipline in the data for NSOPF:93 and NSOPF:99. The task of this study, therefore, was to segment the data from NSOPF:93 and NSOPF:99 so that an analysis might be done on the responses of faculty members who taught in computer science and related fields.

To place this information into context, the researcher provided a brief summary of contemporary findings on the work conditions of computer science professionals in business and industry. Findings from several surveys of the profession—conducted during the same time period as the NSOPF:93 and NSOPF:99—were summarized to give policymakers a contextual frame of reference for comparing academic work conditions to conditions elsewhere (Mateyaschuk, 1999; Morales, 1999; Datamasters 1999; National Research Council, 2001; U.S. Department of Labor, 2001).

Research Questions

A review of the literature revealed that an excellent framework for organizing this study could be found in Herzberg, Mauser and Snyderman's (1959) two-factor (motivator-hygiene) theory, a long-accepted theoretical framework for assessing job satisfaction. According to the

Herzberg et al. model, employees' attitudes about their work are influenced by "intrinsic factors" (also known as "job content" or "motivators") that include the nature of the work, achievement, recognition, responsibility, and growth or advancement. The model also emphasizes the importance of "extrinsic factors" (also known as "job context" or "hygiene") upon job satisfaction; these factors include the institutional policies, administrative practices and supervision, physical working conditions, salary and benefits, status, security, and interpersonal relationships that are a part of the job. Herzberg et al. found that both sets of factors were needed to gain a complete understanding of both the satisfactions and dissatisfactions associated with a worker's job experience.

The organizing framework for this study was also influenced by the findings of two important studies, published in the 1980s, which focused on the working conditions of faculty at American colleges and universities. In *The American Academic Profession* (1984), Martin Finkelstein presented a comprehensive overview of research done on the academic profession in the United States since World War II. Finkelstein's review revealed that faculty members at large, prestigious research universities and at doctorate-granting institutions experienced similar workloads and faced common professional demands, but these working conditions were significantly different from the experiences of their counterparts at smaller, less prestigious colleges and universities. Based on the findings of many of the studies reviewed, Finkelstein concluded that observations about the academic life should take into consideration the differences between the culture at the "elite" institutions and the campus culture of the smaller comprehensive universities and liberal arts colleges.

Finkelstein's observations were corroborated by a massive 1983 survey of the academic profession, conducted by researchers at UCLA and sponsored by Carnegie Foundation for the Advancement of Teaching and the Mellon Foundation. The findings of that survey became the basis for Burton Clark's landmark book, *The Academic Life: Small Worlds, Different Worlds* (1987). After studying the survey responses and qualitative data gathered through follow-up interviews with academics, Clark concluded that faculty members

were generally satisfied with their chosen professions but that the factors which contributed to their job satisfaction were somewhat varied at different types of schools. Distinct differences in campus cultures noted by Carnegie researchers had led them to establish a hierarchy of ten institutional "types," with specialized schools and two-year institutions at the bottom of the hierarchy and research universities at the top (Carnegie, 1987); Clark found, when reviewing the 1983 data, that there were marked differences in the workloads and attitudes reported by the faculties at the doctorate-granting institutions when compared with those reported at the "comprehensive," "liberal arts," and "two-year" institutions. These differences led Clark to conclude that the "fault lines are deep" between faculty experiences at doctorate-granting institutions and at "lesser" institutions, and that institutional differences should be taken into account in analyses of academic professionals' experiences.

In the light of these theoretical models, and the need to profile the computer science teaching profession, this study sought to answer the following research questions:

1. What is the nature of the intrinsic factors computer science faculty members experience working at four-year colleges and universities?
2. What is the nature of the extrinsic factors computer science faculty members experience working at four-year colleges and universities?
3. What is the demographic profile of the computer science faculty members surveyed in NSOPF:93 and NSOPF:99?
4. Are there differences in the reported working conditions experienced by computer science faculty members at research universities and doctorate-granting universities when compared with those of faculty at other four-year institutions?
5. Were the working conditions reported by computer science faculty in NSOPF:93 different from those reported by computer science faculty in NSOPF:99?

Design of the Study

To answer the research questions, this study produced a matrix of information, based on the data gathered by NSOPF:93 and NSOPF:99. Table 1 illustrates the information sets that were generated by this data analysis. Once these sets were generated, the results were

analyzed for significant differences over time (i.e., 1993 responses vs. 1999 responses) and for differences between types of institutions (i.e., responses from doctorate-granting institutions vs. other four-year institutions).

Significance of the Study

Information gained through this study offered policymakers three benefits:

1. The information served as a needed benchmark against which higher education administrators could measure their own computer science teaching positions, to assess how their programs fall short or exceed the norms for such positions.

Table 1

Information Matrix for Current Study

1993	1999
Intrinsic factors, research and doctorate-granting institutions	Intrinsic factors, research and doctorate-granting institutions
Intrinsic factors, comprehensive and liberal arts institutions	Intrinsic factors, comprehensive and liberal arts institutions
<i>Intrinsic factors, all institutions</i>	<i>Intrinsic factors, all institutions</i>
Extrinsic factors, research and doctorate-granting institutions	Extrinsic factors, research and doctorate-granting institutions
Extrinsic factors, comprehensive and liberal arts institutions	Extrinsic factors, comprehensive and liberal arts institutions
<i>Extrinsic factors, all institutions</i>	<i>Extrinsic factors, all institutions</i>
Demographic data, research and doctorate-granting institutions	Demographic data, research and doctorate-granting institutions
Demographic data, comprehensive and liberal arts institutions	Demographic data, comprehensive and liberal arts institutions
<i>Demographic data, all institutions</i>	<i>Demographic data, all institutions</i>

2. When recruiting CS professionals for teaching positions, higher education administrators could use these data to better inform candidates about non-salary benefits that could make academia a satisfying place for them to work.

3. This study utilized NCES data to inform policymakers on an issue of particular importance to the United States Department of Education—how policymakers may increase the supply of postsecondary teachers in the field of computer science. The data analysis done in the course of this study provided much needed empirical evidence that had not been documented at a national level before.

Limitations

The study was subject to the limitation that any study based on a written survey of a population must accede to: the information on the subjects was self-reported and was not corroborated by a third party. Because many of the questions on the survey had to do with *perceptions* of the intrinsic and extrinsic factors experienced by the faculty members, this was not seen to be a crippling limitation.

A second limitation of this study was that the information constituted a snapshot in time. If major changes were to occur in the computer science teaching field in coming years, the generalizability of the results could be impaired.

A third limitation was that a degree of overlap could exist between the respondents on the 1993 survey and the 1999 survey. Because the database did not retain identifying information, it is impossible to know if some individuals responded to both surveys, which could skew the results for the combined group analyses to an undetermined degree.

Finally, this study provided a broad overview of the working conditions of computer science faculties, but it did not attempt to provide in-depth analysis of specific dimensions of those conditions. Because little empirical research had been done on this topic, this broad overview was an appropriate first step toward understanding these conditions and was needed to provide a groundwork for future in-depth studies of particular factors.

Definitions

Computer science faculty: full-time faculty whose primary activity is teaching “for credit” courses in the areas of computer and information sciences, computer programming, data processing, systems analysis, or other computer science topics

Research or doctorate-granting institution: universities that were among the one hundred leading institutions in federal funding for academic science who also awarded at least fifty doctoral degrees in the year prior to the survey (Research I or Research II in the 1987 Carnegie classifications) or universities that awarded at least twenty doctoral degrees in the year prior to the survey (Doctorate-granting I or Doctorate-granting II in the 1987 Carnegie classifications)

Extrinsic factors: aspects of an individual’s work experience that relate to the external conditions of that experience (such as physical working conditions, salary, benefits, status, security, level of supervision, regulations limiting activity, and interpersonal relationships)

Intrinsic factors: aspects of an individual’s work experience that relate to the worker’s perceptions and emotional responses to that experience (such as opportunities to do interesting work or obtain recognition, level of responsibility, perceived opportunities for personal growth and advancement)

Job satisfaction: a positive emotional state resulting from appraisal of one’s job or job experiences

Basic Assumptions

1. Faculty answering the survey for the 1993 and 1999 National Study of Postsecondary Faculty provided accurate information to the best of their abilities.
2. Factors that contribute to job satisfaction are factors that influence the decision to stay in a job or take a different job. These may not be the sole factors that influence the decision, but they represent a significant aspect of the decision-making process and are therefore worthy of study.

Data Collection

The 1993 and 1999 editions of the National Study of Postsecondary Faculty provided excellent opportunities for profiling the working conditions of computer science faculty members at colleges and universities in the United States. Because NSOPF was designed to “provide a national profile of faculty: their professional backgrounds, responsibilities, workloads, salaries, benefits, and attitudes” (U.S. Department of Education National Center for Education Statistics, 2001), it was well suited to provide data for the study. The 1993 study collected responses from 31,354 faculty at 974 degree-granting postsecondary institutions in the United States; in 1999, the NSOPF surveyed 28,704 faculty at 960 institutions. The designs of the NSOPF:93 and NSOPF:99 were tested extensively and verified by researchers at the National Center for Education Statistics.

Delimitations

The sample for the current research was selected from the NSOPF data sets using several criteria. The data sample was limited to faculty who reported

- they were employed at a “four-year, doctorate-granting college or university, graduate or professional school” or at a “four-year, non-doctorate granting college or university.” Faculty who taught at a two-year community, junior, or technical college were excluded in order to enable comparisons among faculty from institutions offering a “traditional” and complete baccalaureate education.
- they were full-time faculty (questions 4-5) whose primary activity was teaching (question 3), and that some or all of their instructional duties related to “for credit” courses (question 2). Part-time faculty were excluded because their pay and benefit packages are often quite different from those of full-time faculty. Faculty who taught only non-credit courses and faculty whose primary activities were research, administration, or other non-teaching activities were excluded because the goal of this study was to profile full-time computer science faculty members who teach degree-seeking students—the type of faculty member that is currently in short supply and thus was the focus of this current study.
- their principal field of teaching was in a computer science field (question 14, field codes 201—computer & information sciences, 202—computer programming, 203—data processing, 204—systems analysis, or 210—other computer science).

Selection of the Sample

The investigator used SPSS 11.5 software to conduct a descriptive analysis of selected variables relating to work conditions and job satisfaction in the study sample described above. For each edition of the survey, the variables were organized into three groups: intrinsic factors, extrinsic factors, and sociodemographic information. Under these three categorical headings, the study examined the following variables. (For a full listing of the identification codes and questionnaire wordings for the questions listed below, see Appendix A.)

Intrinsic Factors

- Nature of the work done by the respondents—time spent working, and the type of activities engaged in during that time (questions 30, 31, 32, 33, 34, 35, 37, and 51)
- Opportunities for research (questions 52 and 53)
- Opportunities for funded research (questions 54 and 55)
- Opportunities for personal growth through continuing education, travel, training, and sabbaticals or release time (question 61)
- Satisfaction or dissatisfaction with the degree of authority held, time available, and the quality of students taught (question 65)
- Satisfaction with workload (question 66a), opportunities for advancement (question 66c), self-improvement (question 66d), consulting opportunities (question 66f), and overall satisfaction with the job (question 66j)
- Factors which could possibly induce the respondent to accept another position inside or outside academia: opportunities to advance (question 69d), no pressure to publish (question 69f), greater opportunities to teach (question 69l), and greater opportunities to do research (question 69m).

Extrinsic Factors

- Respondent's current rank, tenure status, and length of contract (questions 8, 10, and 11)
- Job stability: number of years in current job, number of academic positions held, and number of years he/she has taught in higher education (questions 7, 23, and 25)

- Consulting or other outside professional employment that the respondent has engaged in while employed as a faculty member (questions 20, 21, and 22)
- Facilities and resources available to the respondent (question 60)
- Respondents' satisfaction with job security (question 66b), salary (question 66g), benefits (question 66h), and local job opportunities for spouses (question 66i)
- Factors which could possibly induce the respondent to accept another position inside or outside academia: salary (question 69a), tenure (question 69b), job security (question 69c), benefits (question 69e), facilities (questions 69g and 69h), job opportunities for spouses (question 69i), geographic location (question 69j), and good schools for children (question 69k)
- Salary earned as a faculty member and outside income also earned (questions 75 and 76)
- Total household income of the respondent (question 79)

Sociodemographic Information and General Attitudinal Data

- Highest degree held, and field of degree (question 16)
- Gender (question 81)
- Age (question 82)
- Ethnic origin (questions 83 and 84)
- Marital status (question 87); whether respondent has a spouse who is employed in higher education (question 88)
- Nationality and citizenship (questions 89 and 90)
- General attitudinal responses that do not necessarily fit under the headings "intrinsic" or "extrinsic" factors, but which could provide additional interesting information for the profile of this faculty. These questions range from attitudes about retirement (When do you plan to retire? Would you take early retirement? Would you consider teaching part-time after retirement? Have you already retired from another position?) to how likely it is that the respondent will leave his/her current position and what factors would induce the respondent to leave (questions 67, 68, 70, 71, 72, 73, and 74).

Data Analysis

The downloaded data files for the NSOPF:93 and NSOPF:99 were verified prior to analysis by comparing field layouts to those printed in the code books published for those surveys (U.S. Department of Education National Center for Education Statistics, 1997; U.S. Department of Education National Center for Education Statistics, 2001). The data were filtered to select only the answers provided by full-time faculty members teaching in computer science fields at four-year institutions. Responses were then calculated for the questions listed above. Though the questions were grouped into the three categories of “intrinsic factors,” “extrinsic factors,” and “demographic information and general attitudinal data,” each question was calculated and reported separately. Responses on individual questions were then sorted according to the year they were reported (1993 or 1999), to determine whether there were significant changes in the responses gathered at the different times. Finally, responses on individual questions were resorted according to the Carnegie classification of the institutions where the respondents worked, to determine whether there were significant differences in responses coming from research and doctorate-granting universities vs. other colleges and universities.

Summary

The need for recruiting computer science professionals to teach at colleges and universities in the United States is well documented, but to date there has been little empirical evidence gathered about the benefits and satisfactions of teaching computer science at the postsecondary level. The National Survey of Postsecondary Faculty offers a wealth of raw data on this subject, but the results had never before been filtered and analyzed for specifics about computer science faculty. By doing so, the current study offered useful information to policymakers and university administrators seeking to assess their computer science programs and attract qualified professionals to the professoriate.

CHAPTER TWO

Review of Related Literature

The literature upon which this study is grounded was best reviewed by dividing it into two sets: theoretical literature and empirical literature. The theoretical literature provided the framework for the study and included sources that offered conceptual support for the study. The empirical literature summarized what was known about the job conditions of computer science professionals in academia and those of their counterparts outside academia. This second section of the literature review was therefore organized into two subsections—studies that described the working conditions of computer science professionals in business and industry, and studies that described the working conditions of faculty in higher education.

Theoretical Literature

Thousands of articles, books, and research studies have been written exploring the factors that lead people to choose jobs and find satisfaction (or dissatisfaction) in those jobs. The subject holds interest for researchers in a wide range of fields, from industrial psychology to organizational sociology to human resource management. Though generally the researchers agree that what draws a person to accept a job is the perception that the job will satisfy his/her desires and needs (Lawler, 2000), from there the research is divergent and, ultimately, inconclusive.

Research in job satisfaction is usually traced back to the Hawthorne studies, conducted in the early 1930s by Harvard professors Elton Mayo and Fritz Roethlisberger. Their observations of American workers in an industrial setting led them to question many basic assumptions then in vogue among business managers and administrators. Mayo and Roethlisberger were the first to suggest that workers could be motivated by factors other than economic incentives, and many of their conclusions paved the way for future research in job satisfaction (Hoy & Miskel, 1991).

The next major milestone in the development of job satisfaction theories came with the publication of A. H. Maslow's "A Theory of Human Motivation" in 1943. Maslow detailed a theory of a "hierarchy of needs" which separated human needs into five categories: physiological, safety, social, esteem, and self-actualization. Maslow suggested that these needs function in a pyramid-like hierarchy, with physical well-being forming the base of the hierarchy and self-actualization being the ultimate need. When lower-level needs (those relating to food, shelter, and safety) are satisfied, the successively higher needs become influential in motivating human behavior, he said; but if lower-level needs remain unsatisfied, higher needs such as esteem and self-actualization may be minimized or forgotten (Maslow, 1943).

Maslow's "hierarchy of needs" offered an essentially one-dimensional explanation of human motivation, positing that the presence of motivators (at one's current level of need) causes satisfaction and the absence of those motivators causes dissatisfaction. Herzberg, et al. (1959) took the discussion to a two-dimensional level with his "motivator/hygiene" theory of job satisfaction. Herzberg claimed that factors leading to job satisfaction are "separate and distinct" from factors that lead to job dissatisfaction. The presence of "motivators" or "intrinsic factors" (opportunities to do interesting work and to obtain recognition, responsibility, growth, and advancement) contributes to a satisfying work experience. The absence of these factors, however, does not necessarily bring job dissatisfaction, according to Herzberg; it just renders the situation neutral. Job dissatisfaction, he said, is created by the lack of "extrinsic" or "hygiene" factors (appropriate institutional policies, supervision, physical working conditions, salary and benefits, status, security, and interpersonal relationships). When these "extrinsic" factors are not provided, job dissatisfaction is the result, but the presence of these factors only renders the situation neutral once again. Therefore, job satisfaction, according to Herzberg, is a two-factor phenomenon: the presence of "motivators" stimulates growth and increases satisfaction, while the absence of "hygiene factors" frustrates the worker and leads to job dissatisfaction.

In more recent years, researchers have built upon the theories of Maslow and Herzberg et al. in a variety of ways. Some, such as Kalleberg (1977) and Locke (1976), have argued that Herzberg's two categories are too artificial—that factors that lead to satisfaction are not always separate and distinct from the factors that lead to dissatisfaction. Others have concluded that Herzberg's theory fails to consider the importance of personal values (Thompson & McNamara, 1997) and the degree of "fit" or congruence between the worker and the workplace environment (Dawis & Lofquist, 1984).

A preponderance of the research done since the publication of Herzberg et al., however, has gone the direction of investigating the relative importance of the various intrinsic and extrinsic factors. In the area of intrinsic factors, studies have found a positive correlation between job satisfaction and the use of the worker's abilities (Iacqua & Schumacher, 1995; Locke, Fitzpatrick & White, 1983; Olsen 1993; Olsen, Maple & Stage, 1995), the nature of the work (Lillydahl & Singell, 1993; Nicholson & Miljus, 1972; Moody, 1996), recognition and support (Hill, 1986-1987; Olsen 1993; Pearson & Seiler, 1983) and opportunities for research (Iacqua & Schumacher, 1995; Moody, 1996; Pearson & Seiler 1983). Other studies have documented the significance of extrinsic factors such as salary (Aguirre, Martinez & Hernandez, 1993; Hagedorn, 1994; Hemmasi, Graf & Lust, 1992; Lillydahl & Singell, 1993; Olsen 1993; Schultz & Chung, 1988), relations with administrators and co-workers (Aguirre, Martinez & Hernandez 1993; Hagedorn, 1994; Hill, 1982, 1984; Lillydahl & Singell, 1993; Locke, Fitzpatrick & White, 1983; Nicholson & Miljus, 1972), and facilities (Lillydahl & Singell, 1993; Locke, Fitzpatrick & White, 1983).

With so many different and overlapping approaches having been taken to studies of these factors, it could be expected that a consensus has emerged about the relative importance of one factor or another upon job satisfaction. But this has not been the case, for as often as a study has come out championing a particular set of factors, another study has come out giving weight to another set of variables.

This jumble of conflicting studies moved researcher Martin Finkelstein to undertake a comprehensive review and analysis of the literature, in an effort to "bring together the scattered,

largely inaccessible results of social scientific and dissertation research on faculties and research on different aspects of the faculty role into a single, broadly accessible format” (1984, p. 3).

The results, published in 1984 under the title, *The American Academic Profession: A Synthesis of Social Scientific Inquiry Since World War II*, reflect the many approaches researchers have taken to the topic of faculty job satisfaction. Finkelstein notes these differences but also observes a common thread running through the variants: “Among that small group of studies that consider both intrinsic and extrinsic factors in relation to faculty job satisfaction, the former uniformly emerge as much more important,” he writes.

The absence of multivariate analysis precludes any precise specification of the magnitude of impact of intrinsic, job related factors, but it appears that their relative significance vis-a-vis extrinsic ones is most certainly higher. Although a considerable body of evidence suggests that intrinsic, work related factors may be the most important determinants of job satisfaction, some further evidence suggests that the extrinsic factors examined earlier may be more important determinants of job dissatisfaction. (p. 147)

Citing the findings of Swierenga (1970), Avakian (1971), and Leon (1973), Finkelstein concludes that

satisfaction/dissatisfaction may not be a uni-dimensional construct, but may rather exist as two separate continua, subject to unique sets of determinants (roughly equivalent to Herzberg’s (1959) “Hygiene”—job context—and “Motivator”—job content factors). . . . In sum, it would appear that faculty satisfaction with their work, while broadly shaped by the academic career process, is derived primarily from the nature of the work itself and the relative autonomy with which it is pursued, whereas dissatisfaction tends to center on extrinsic, organizational factors, such as administrative leadership and salary. The primary source of satisfaction, no less than of work motivation, is clearly internal. (pp. 147-148)

Finkelstein’s review of the literature also led him to conclude that the academic work experience varies substantially across different types of institutions. He outlines three possible causes for these differences in campus cultures:

1. *Differential reward systems.* At elite institutions, the reward system is more monolithic and emphasizes research, while at other institutions, it is more flexible and oriented toward teaching. Faculty tend to expend their effort in those areas perceived to “pay off.”
2. *Differential work load assignment.* At elite institutions, the teaching load is uniformly lower, while at other institutions, it is uniformly higher, albeit flexible.

3. *Differential faculty selection.* Different allocation patterns may be a function of selecting faculty with a particular sense of their professional responsibilities and internalized standards for effort. (p. 91)

Finkelstein's observations on how varied academic settings can be were echoed three years later in Burton Clark's *The Academic Life: Small Worlds, Different Worlds* (1987).

Clark writes,

The extensive differentiation of American higher education . . . provides a variety of settings in which individual academics can play to their preferences and strengths. Individuals do not have to attune themselves to one set of incentives and rewards and to fit one set of duties and competencies. By self-selection, researchers drift toward research settings, teachers toward teaching settings; big-city folk toward urban universities, pastoral types toward the small campus in the rolling countryside; those who insist on teaching bright undergraduates toward the better liberal arts colleges, those with the open access spirit toward the public two-year campuses. (p. 231)

Like Finkelstein, Clark notes that many of the differences in campus cultures can be traced back to the differences in work loads that are typical at different levels of the higher education hierarchy:

Using the nine basic Carnegie categories of institutions, we see . . . that only about one in twenty faculty members in the leading research universities was teaching undergraduates more than eleven hours a week compared with three out of four in the two-year colleges; about one-third of the Research University I faculty were not teaching undergraduates at all in a given semester or term compared with a tiny minority so reporting in the community colleges—staff members who apparently were otherwise occupied in counseling or administration. Two thirds of the faculty in the leading universities were teaching undergraduates less than four hours a week or not at all. . . . Between the two extremes, the figures run smoothly in order up and down the institutional types, the exception being that fewer faculty in the better liberal arts colleges teach larger loads than do faculty in the comprehensive four- and five-year institutions. (p. 74)

Despite these varied circumstances, Clark also found a common thread running through faculty attitudes about professional satisfaction:

The explanation lies in the compensating power of intrinsic rewards. . . . Overwhelmingly, in all institutional sectors, faculty members reported a strong belief in education, that "education offers the best hope for improvement of the human condition." Here we find a sustaining myth that can overshadow diminished material rewards. When faculty members believe they are actively engaged in providing man's best hope for improvement, they possess a supreme fiction of great power that echoes with a sense of calling. . . .

In response to another question, faculty members noted that they greatly enjoy interacting with young people: As many as nine out of ten professors, from all types of institutions, claim they “enjoy opportunities to interact informally with students outside the classroom,” let alone meet them in classes and laboratories. Even in the leading universities, where professors reputedly avoid informal contact with students, the survey respondents took the high road and claimed otherwise. . . .

Most important, whenever the intensive field interviews touched the domain of satisfaction, they tapped the strength of intrinsic motivation, the rewards of doing academic work for its own sake, its own challenge and passion. (pp. 221-222)

Clark, Finkelstein, and the many other researchers who have addressed the topic may thus come up with varying results on which factors influence job satisfaction in what setting, but they do all agree on this: that the intrinsic and extrinsic factors identified by Herzberg and later researchers somehow work in combination to influence a worker’s sense of satisfaction with his or her job. It may be the case, as later researchers have argued, that in addition to these factors there must be a congruency between the values of the worker and the values of the workplace (what could seem like a “dream job” for one person definitely could be less than satisfying for another). But that does not eliminate the basic importance of the intrinsic and extrinsic factors; though there may be more to the total “picture” of job satisfaction, the fact remains that the intrinsic and extrinsic factors are important components that job seekers consider when choosing a job, components which together affect the workers’ ultimate satisfaction with the job experience. And because these factors are also elements over which higher education administrators have some degree of control, they are worthwhile subjects for study as we seek to find new ways of attracting new recruits to the teaching profession.

Empirical Literature

CS Professionals in Business and Industry

When the National Research Council Committee on Workforce Needs in Information Technology embarked on a study of the industry in 1998, the group quickly found that statistics pertaining to CS workers varied widely from one source to another. Eventually, the group concluded that it was impossible to reconcile the varying estimates of

the size and compensation rates of the CS workforce produced by various analysts because they used different data sets and counted different populations (National Research Council, 2001). In keeping with this observation, the present study did not attempt the "impossible" but, instead, cited several sources that provided information on CS compensation in 1998-99 (the time frame of the most recent NSOPF survey).

1. According to the U.S. Department of Labor, in 1998 the median annual earnings of computer systems analysts were \$52,180, with the middle 50 percent earning between \$40,570 and \$74,180. Median annual earnings of computer engineers were \$61,910, with the middle 50 percent earnings between \$46,240 and \$80,500 (U.S. Department of Labor, 2001).

2. Based on the results of its National IT Salary Survey of more than 21,000 CS professionals, *InformationWeek* magazine reported that in 1999 CS managers earned a median annual base salary of \$71,000 and CS staff members earned a median annual base salary of \$54,000 (Mateyaschuk, 1999).

3. Though CS median salaries might not seem remarkably higher than those found in other sectors, the U.S. Department of Labor notes that *starting* salaries in the CS can be significantly higher than those of other fields. According to Robert Half International, starting salaries in 1999 ranged from \$61,300 to \$88,000 for database administrators and from \$42,800 to \$59,800 for network administrators. Starting salaries in software development ranged from \$55,000 to \$80,000 for software engineers and from \$50,000 to \$65,000 for software installer/developers. Salaries for Internet-related occupations ranged from \$50,000 to \$73,000 for security administrators, \$51,500 to \$73,000 for webmasters, and from \$47,000 to \$65,000 for web developers (U.S. Dept of Labor, 2001).

4. Another factor which must be considered when looking at CS salaries is that base salary only represents one part of the compensation picture. The National Research Council Committee on Workforce Needs in Information Technology notes that statistics on base wages often do not reflect the complexity of compensation packages for computer

professionals in business and industry. In addition to salary, non-salary cash awards and long-term incentives such as stock options made up from 23 to 48 percent of the CS professionals' total compensation packages, according to industry surveys conducted by SC/CHiPS in 1997, 1998, and 1999 (National Research Council, 2001).

The competitive salaries and attractive incentives offered to CS professionals in business and industry testify to the steadily increasing demand for these workers. The latest Bureau of Labor Statistics data on job trends show computer and data processing services jobs to be both the fastest growing job sector (with an average annual rate of increase of 6.4 percent) and the one showing the greatest total growth (expected to increase by 1,805,100 jobs between the years 2000 and 2010) (*Professional Education & Employment Reporter*, 2002). A survey commissioned by the Information Technology Association of America estimated that the information technology (IT) workforce numbered 10 million in 1999. In a year 2000 survey by the same group, the number had risen to over 10.4 million. The ITAA survey found that 9.5 million of these workers were employed in non-IT companies. The greatest need for CS workers, they found, was in the largest segment of the economy—in smaller, non-IT firms. ITAA reported that these firms (of the size employing 50 to 99 employees) would need one million new CS workers in 2000 or 70 percent of the total demand for all new CS employees (ITAA, 2000). More recent findings indicate that the demand for CS workers has not been affected by the recent “dot com” downturn, primarily because the need for such workers is spread throughout the economy (U.S. Department of Labor, 2002; New York Times Job Market Research, 2002).

In short, the trend seen in the late 1990s is expected to continue, and it is anticipated that demand for CS workers will continue to push salary/benefit packages higher in coming years—presenting a constantly moving target for higher education administrators who hope to match those salaries.

It is a commonly held belief that information technology professionals earn these higher salaries by working longer hours than the average worker. However, the literature does not always support that notion:

- The U.S. Department of Labor, Bureau of Labor Statistics Current Population Survey in March 1999 showed that CS workers put in an average of just under 40 hours a week, with full-time managers, executives, and professional specialty workers averaging 44.7 hours per week. The same report showed that only 10.5 percent of computer systems analysts and scientists and 8.6 percent of computer programmers worked more than 50 hours per week in 1999 (National Research Council, 2001).
- A November 1999 survey by *Software Development* magazine yielded similar results, with 61 percent of those surveyed reporting that they worked 41 to 50 hours per week; only 13 percent said they worked 51 to 60 hours per week, and 4 percent said they worked 61 hours or more (Morales, 1999).
- On the other hand, the National Research Council's Committee on Workforce Needs in Information Technology conducted research on the IT workloads in 1999 and concluded that the statistics mask a wide variation in work hours characteristic of different individual employers. The committee attributed this phenomenon to the fact that market windows for certain IT firms are small, which leads those firms to push employees to work long hours. The committee also noted that "the individual culture of some firms—not only in the IT sector—involves very long hours. People who work reduced hours are often seen as uncommitted to project success and/or to their employer. And, in competitive environments that reward differential effort, private incentives lead people to work too much" (National Research Council, 2001, p. 193).

The profile of CS workers in industry is generally one of youth and frequent moves from one job to another. A 1999 *Software Development* magazine survey with 3,969 responses revealed that 60 percent of those surveyed have worked for their company for five years or less and 77 percent are younger than 45 (Morales, 1999). The 1999 *InformationWeek* survey concluded that job hopping is common, with staffers moving on after four years, while managers stay for about five years. Seventy percent of those responding to that survey said that they had been contacted by headhunters in the previous year (Mateyaschuk, 1999). And the Information Technology Association of America found that non-CS firms expected their CS employees to remain on staff for an average of 36 months, where CS firms reported that they expected their

employees to remain on staff for an average of 30 months (Information Technology Association of America, 2001).

The downside of this highly mobile workforce is that some CS workers find the industry offers less job security than they might find in other fields. A growing number of computer professionals are employed on a temporary or contract basis; many are self-employed, working independently as contractors or self-employed consultants (U.S. Department of Labor, 2001). Older workers have sometimes charged that the profession's highly mobile nature can create problems for workers as they get older. Exploring these charges of age discrimination, the National Research Council reported,

The available data relevant to age and employment of older Category 1 IT workers indicate that the IT workforce is younger than that in other occupations with workers of comparable educational attainment (46 percent of those in professional specialty occupations overall are under the age of 40, while 58 percent of IT workers are under the age of 40), and that older IT workers (those 40 years and older) are more likely to lose their jobs than younger IT workers. However, these data also indicate that older IT workers are just as likely to find new jobs as are younger IT workers, and the length of time it takes for them to find new jobs is similar to that for younger IT workers. Finally, these data indicate (though not at a level that is statistically significant) that when displaced older workers find new jobs, their base salary is lower than that of their previous jobs, whereas displaced younger workers in a comparable position find higher base salaries. . . . The data available to the committee are insufficient to establish either the presence or the absence of age discrimination (National Research Council, 2001, pp. 7, 149).

In many ways, CS work in industry requires abilities similar to those required in academia. The U.S. Department of Labor Occupational Outlook Handbook states that CS workers must be able to think logically, have good communication skills, and be able to deal with a number of tasks simultaneously. The handbook also notes that "Technological advances come so rapidly in the field that continuous study is necessary to keep skills up to date. To keep a competitive edge, firms will continue to demand computer professionals who are knowledgeable about the latest technologies and able to apply them to meet the needs of businesses" (U.S. Department of Labor, 2001, p. 112). Like faculty members at colleges and universities across the country, CS professionals must devote some of their

work time to on-going professional development and activities that will help them stay current in their field.

The literature also suggests that the factors that motivate CS professionals are situations that are often found in the campus environment. One of the charges of the National Research Council's Committee on Workforce Needs in Information Technology in 1999 was to identify ways that the U.S. government could attract needed CS professionals. Though the committee found that government pay scales are significantly lower than the pay offered by industry, the group identified a number of nonmonetary incentives that might make the federal government more competitive with the private sector for CS workers. Those incentives included interesting work, flexible working conditions, and tuition reimbursement for attaining a new degree or certification (National Research Council, 2001).

Other studies corroborate those findings. *Software Development* magazine's 1999 survey with 3,969 responses revealed that, for those planning to change jobs, more were motivated by the prospect of finding greater challenge than that of receiving higher compensation (Morales, 1999). The 1999 *InformationWeek* survey results reported that 86 percent of staff members and 89 percent of the managers said job challenge was more important than base pay and job atmosphere (Mateyaschuk, 1999). And the conclusions drawn by the National Research Council offer hope to higher education administrators seeking to attract CS professionals to academia:

Many surveys report that employees commonly rank compensation lower on their priority lists than technical challenges and the opportunity to learn new technical skills. Many IT workers . . . are sustained by a love of technology and the intellectual challenges of working on cutting-edge problems with others of comparable technical skill and intelligence. This is not to say that money is unimportant—but rather that they are also motivated strongly by their intellectual environment (National Research Council, 2001, p. 195).

CS Professionals in Higher Education

It is generally acknowledged that the most comprehensive study of college and university faculties in recent times is found in Howard Bowen and Jack Schuster's *American*

Professors: A National Resource Imperiled (1986). Bowen and Schuster's study, which received the support of such leading groups as TIAA-CREF, the American Association for Higher Education, the Carnegie Corporation of New York, the Ford Foundation, and the Exxon Education Foundation, looked at a wide range of issues pertaining to the professoriate—from the attributes of those who choose the profession and the nature of their daily work environment to the health of the academic labor market in the U.S. The authors concluded that the profession was in peril:

In our view, three congeries of problems today press hard upon the professoriate and affect also those who contemplate academic careers: inadequate compensation, a deteriorating work environment, and an inhospitable academic labor market. The most visible of these three is the steep decline in real faculty compensation over the past dozen years. As serious as the erosion of faculty earnings is, less tangible developments pose an even greater threat to the faculty. After all, those who are attracted to "the life of the mind" rarely value income potential above other considerations (p. 268).

Bowen and Schuster emphasized that "the rewards of the academic profession are to an unusual degree intrinsic" (p. 113):

This includes the teaching load; the kinds of colleagues; the qualifications of students; the facilities, equipment and supplies; secretarial and research assistance; the physical, cultural, and social ambience; support of professional travel; sabbatical and other leaves; and non-monetary fringe benefits such as use of recreational facilities and scholarship funds for faculty children. These emoluments are very important to faculty and often weigh more heavily in decisions to join or to leave the academic profession, or to join or leave a particular institution, than monetary compensation (p. 260).

American Professors: A National Resource Imperiled provided a thorough documentation of the academic profession as it stood in the mid-1980s, detailing not only statistics about compensation but also about the attitudes and activities of faculty members. The authors' observations were generally about the professoriate as a group. Occasionally, however, they would include information about specific disciplines. Such was the case when they cited the findings of a National Science Foundation study on the workloads of full-time faculty members in science, engineering and social sciences. When considering these faculty members as a group, the study found that the professors' average workload of 45.8 hours per

week actually had seasonal variations: during the academic year, their average went up to 50 hours a week but during the summer it fell back to 35 hours a week. When the study broke out the faculties by discipline, however, it was found that professors in mathematics, statistics, and computer science worked an average of 40.6 hours over the course of a year—an average somewhat lower than the 45.8 hour-per-week average of the total group.

Bowen and Schuster based their report on more than 500 interviews conducted at 38 colleges and universities located across the country in 1985. The generally acknowledged value of this research led to the creation of a new, nationwide survey of faculty, sponsored by the U.S. Department of Education. The National Study of Postsecondary Faculty (NSOPF), first conducted in 1988 and repeated in 1993 and 1999, went a step beyond Bowen and Schuster's efforts by documenting survey responses from faculty at a far greater number of institutions—480 schools in 1988, 974 schools in 1993, and 960 schools in 1999. The results of the 1988 and 1993 surveys have served as the basis of a large number of articles and publications, many of which have been sponsored by the U.S. Department of Education Office of Educational Research and Improvement. The results of the 1999 survey have not been studied to as great an extent, since the results were not made available to researchers until the fall of 2001.

Fiorentino (1999) offers one of the most useful studies relating the NSOPF:93 data to research in faculty job satisfaction; her work provides not only an excellent bibliographic review on the topic but also proposes an interesting analytical model for exploring the relationship between various intrinsic and extrinsic factors and job satisfaction. A significant limitation of Fiorentino's work, however, is that it treats the surveyed faculty as a group; it does not examine possible differences between disciplines. A decade before, Bowen and Schuster (1986) warned that it could be shortsighted to take such an approach:

The American professoriate is in many ways a homogeneous professional group with shared interests and values. At the same time, it is composed of persons identified with hundreds of different disciplines and subspecialties. And people in the various disciplines tend to differ as to personal and educational backgrounds and world outlooks. . . . Many studies have shown that faculty members in different fields exhibit significantly different personal characteristics and attitudes. Ladd and Lipset . . . in their extensive studies of the professoriate conclude, “. . .

we commonly find greater differences of opinion among the various scholarly disciplines than we can locate among the most grossly differential groups in the general public, such as rich and poor, young and old, and white and black" (pp. 49-50).

A few recent studies have acknowledged these differences, but unfortunately few of them have chosen to focus on the discipline of computer science. Conley and Zimble (1997) come close in their "Characteristics and Attitudes of Instructional Faculty and Staff in the Humanities," which breaks the data from NSOPF:93 into five major discipline areas: business, law and communications; humanities (English literature, foreign languages, history, philosophy, and religion); natural sciences and engineering; social sciences and education; and "all other program areas." Conley and Zimble compare the responses of the humanities faculties to the faculty responses in the other areas, on a question-by-question basis, which sheds light on the broad differences between the disciplines. Any possible differences *within* the non-humanities categories, however, go unexplored.

The few recent studies that do focus exclusively on the discipline of computer science have limited their analyses to demographic variables such as gender and ethnicity (Cphoon, 2000; Howell, 1996; Robst et al., 1996). The exceptions can be found in reports on the Taulbee Survey of Ph.D.-granting departments of computer science and computer engineering, conducted annually by the Computing Research Association. Though the Taulbee Survey does document gender representation and ethnicity of computer science faculty members at the instructor, assistant professor, associate professor, and full professor levels, it goes several steps further, comparing new hires to continuing faculty, documenting trends in faculty losses, and salary averages and ranges for the various ranks. The 1999-2000 survey report (Bryant & Irwin, 2001) provides correlative data for the NSOPF:99, with salary information and estimated percentage of salary increase over the previous year (Table 2).

The most recent Taulbee report also reports that since 1995 there has been a noteworthy increase in the percentage of students who are nonresident aliens among

computer science Ph.D. students in the United States (Bryant & Vardi, 2002). This trend is a noteworthy factor in the total picture of faculty recruiting prospects, because it means that many of the qualified new graduates coming out of Ph.D. programs are students who do not intend to remain in the United States after graduation. More than 50 percent of the current Ph.D. students identified themselves as nonresident aliens in 2000/01, according to the 2002 survey (Bryant & Vardi, 2002), and though these students were certainly welcomed in CS departments across the country, their long-term career plans did not hold promise for educators hoping to recruit them into the teaching ranks.

With the exception of the annual Taulbee reports, then, there was little in the literature that offered documentation specifically on computer science faculty in American colleges and universities. Though there have been a number of recent studies that have utilized the NSOPF data (Bradburn & Sikora, 2002; Chen, 2002; Conley & Leslie, 2002; Parsad & Glover, 2002), they have not provided detailed information about computer science faculty. The Conley and Zimbler (1997) study took a step in the right direction, but it utilized only data from the 1993 NSOPF; the availability of un-analyzed 1999 data made a new study focused on computer science data both worthwhile and desirable.

Table 2

Nine-Month Salaries. U.S. Computer Science Departments 1999-2000

Faculty Rank	Reported Salary Minimum, Mean	Average of All Salaries	Reported Salary Maximum, Mean	% Increase Over Previous Year
Instructor	\$45,455	\$52,034	\$60,062	7.6%
Assistant Professor	\$64,913	\$68,671	\$72,563	6.9%
Associate Professor	\$70,378	\$77,156	\$85,701	6.9%
Full Professor	\$80,864	\$99,811	\$129,991	4.5%

Note. Bryant, R., & Irwin, M. (2001). 1999-2000 Taulbee Survey: current and future Ph.D. output will not satisfy demand for faculty. *Computing Research News*, 13 (2), 11.

Summary

More than 80 articles and books were reviewed for information relevant to this project, including three landmark studies on the academic profession in America (Bowen & Schuster, 1986; Clark, 1987; Finkelstein, 1984). There was concurrence among the works relating to theories of job satisfaction that workers' satisfaction is influenced to some degree by both intrinsic and extrinsic factors; this confirmed that the intrinsic/extrinsic model is a suitable framework for this study. The literature also suggested that differences exist in campus cultures at "elite" universities that can make the work experience there different from that at other four-year institutions; this justified an examination of the NSOPF data, to see if such differences were reflected there. Finally, literature documenting the working conditions of computer science professionals in business and industry and in academe confirmed that salary levels were indeed higher outside of academia; the literature did not, however, provide information about the working conditions of computer science faculty at the university level. The results of the current study therefore were expected to make a needed addition to the literature on this subject.

CHAPTER THREE

Methodology

Introduction

The data used in this study were obtained from the National Center of Education Statistics' (NCES) National Study of Postsecondary Faculty (NSOPF), conducted in 1992-93 and in 1998-99. Because NSOPF was designed to "provide a national profile of faculty: their professional backgrounds, responsibilities, workloads, salaries, benefits, and attitudes" (U.S. Department of Education National Center for Education Statistics, 2001), it was well suited to provide data for the current study. There were slight variations in the survey formats and criteria for sample selection between the 1993 and 1999 versions of the survey, but these minor variations had no significant effect on the versions' comparability to each other; together they proved to be excellent sources of raw data for this study of the working conditions of computer science faculty members at colleges and universities in the United States.

Survey Design and Response Rates

1993 Survey

The 1992-93 version of the National Study of Postsecondary Faculty (NSOPF:93) was conducted by the National Opinion Research Center at the University of Chicago at the behest of the U.S. Department of Education. The first phase of the NSOPF:93 consisted of an institutional survey that went to a stratified, random sample of public and private, not-for-profit higher education institutions in the United States. In order to obtain accurate, reliable data, NCES determined that a minimum of 789 institutions would have to be surveyed; to offset potential non-participation by some institutions, the NCES chose to survey 974 institutions. From these institutions, faculty lists were requested, and 817 (84.9 percent) agreed to participate. This provided a list of 31,354 faculty members to be surveyed in the second phase of the

NSOPF:93: 25,780 questionnaires were then completed by faculty members at those institutions for a response rate of 86.6 percent (U.S. Department of Education, NCES 98-287, 1997). The NCES verified the representativeness of the sample by comparing characteristics of the sampled faculty with characteristics of faculty in the entire universe of institutions known through the Integrated Postsecondary Education Data System (IPEDS), a recurring set of surveys maintained by the NCES. The researchers found no significant differences in the populations (U.S. Department of Education, NCES 98-287, 1997). A lengthy analysis of these and other procedures used to design and collect NSOPF:93 can be found in the *1993 National Study of Postsecondary Faculty: Methodology Report*, NCES 97—467 (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1997).

1999 Survey

A two-stage stratified, clustered probability design was also used to select the sample for the NSOPF:99, which was conducted in 1998-99 by the Gallup Organization. The first-stage sampling frame consisted of the 3,396 postsecondary institutions that provided formal instructional programs of at least two years' duration and that were public or private, not-for-profit institutions, drawn from IPEDS records. Where the 1993 version of the NSOPF was aimed at institutions that the Department of Education recognized as accredited, that criterion was supplanted in the 1999 version by the criterion that participating schools had to have signed participation agreements to receive Title IV federal financial assistance. And though the IPEDS universe included private institutions that were both for-profit and not-for-profit, the institutional universe for NSOPF:99 excluded the private, for-profit institutions.

The 3,396 qualifying institutions were stratified based on the highest degrees they offered, the amount of federal research dollars they received, and whether they were public or private. Each institution was asked to provide a list of full- and part-time faculty and instructional staff that would include all personnel who had faculty status or instructional responsibilities during the 1998 fall term (i.e., the term that included November 1, 1998). A total of 818 institu-

tions agreed to participate by providing lists of faculty and instructional staff, for a participation rate of 85.3 percent. Faculty and instructional staff at the institutions completed and returned 18,043 questionnaires, for a weighted response rate of 83.0 percent; faculty nonresponse bias analyses did not detect any bias (U.S. Department of Education, NCES 2002-154, 2002).

A lengthy analysis of these and other procedures used to design and collect NSOPF:99 can be found in the *1999 National Study of Postsecondary Faculty: Methodology Report*, NCES 2002—154 (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2002).

Accuracy of Estimates

The statistics in this study are estimates derived from a sample of the population universe. Such estimates are subject to two broad categories of errors. *Sampling errors* can occur because the estimates are based on a sample of individuals in the population, rather than the entire population. Sampling errors can be quantified by using statistical procedures to calculate the standard error for the mean (an estimate of the variance that could be obtained in the sample in repeated samplings, using the same sample design and sample size).

Sampling estimates can also be biased by *nonsampling errors*, which can arise not only in sample surveys but also in complete censuses of entire populations. Such errors can arise because of nonresponses, differences in respondents' interpretations of the meaning of questions, memory effects, misrecording of responses, incorrect coding or data entry, time effects, or errors in data processing. To minimize nonsampling errors in these studies, the questionnaires and the procedures for sample design, data collection, and data processing were field tested by NCES researchers with a national probability sample of postsecondary institutions and faculty members in 1992 and again in 1998. To evaluate reliability, a subsample of faculty respondents was re-interviewed in each instance. Extensive item nonresponse analyses of the questionnaires were conducted, and a computer-based editing system was used to check data for range errors, logical inconsistencies, and erroneous skip patterns. When erroneous skip patterns were detected, values were logically assigned on the basis of the

presence or absence of responses within the skip pattern whenever feasible, given the responses (U.S. Department of Education, NCES 98-287, 1997; U.S. Department of Education, NCES 2002-154, 2002).

Study Sample

In order to conduct the needed analysis on data gathered through the faculty surveys of the NSOPF:93 and NSOPF:99, the author applied for and received, from the U.S. Department of Education, a restricted data license for use of the raw data sets. The data records for these surveys initially contained all recorded responses from faculty and staff who completed the surveys (25,780 respondents for the 1993 survey, 18,043 respondents for the 1999 survey). For each survey, the data were then filtered, using the following variables to narrow the responses so that the final data set matched the population parameters established for the study:

- *Principal field of teaching* (question a12a, 1993; question 14, 1999): filtered to retain only those surveys indicating computer science as the primary teaching field (field codes “200—computer science,” “201—computer & information sciences,” “202—computer programming,” “203—data processing,” “204—systems analysis,” or “210—other computer science”). This step reduced the number of qualified respondents from 25,780 to 699 on the 1993 survey and from 18,043 to 597 on the 1999 survey.
- *Principal activity* (question z2, 1993; question 3, 1999): filtered to retain only those surveys answering “1—teaching.” This step reduced the number of qualified respondents from 699 to 608 on the 1993 survey and from 597 to 497 on the 1999 survey.
- *Institution 1987 Carnegie classification / Institution 1994 Carnegie classification* (derived variable x05_0 on both surveys): filtered to exclude survey responses from faculty at institutions coded as “9—2 year” or “10—other;” the remaining responses were from faculty at institutions classified as Research I, Research II, Doctoral I, Doctoral II, Comprehensive I, Comprehensive II, Liberal Arts I, or Liberal Arts II. This step reduced the number of qualified respondents from 608 to 265 on the 1993 survey and from 497 to 217 on the 1999 survey.
- *Employed part time/full time* (question a4, 1993; question 5, 1999): filtered to retain only respondents who identified themselves as “2—full time.” This step

reduced the number of qualified respondents from 265 to 202 on the 1993 survey and from 217 to 145 on the 1999 survey.

By filtering for these four variables, it was possible to create a subset of the data, which consisted of the responses returned by full-time faculty who taught “for credit” computer science courses at four-year colleges and universities in the United States.

Comparison of the survey questions for NSOPF:93 and NSOPF:99 revealed that the latter survey constituted an expansion of the 1993 survey. Though most of the questions that appeared on the 1993 survey also appeared on the 1999 version, they did not always appear in the same order, and with the addition of new questions, the resulting number system on NSOPF:99 was very different from that of its predecessor. To facilitate comparisons between the two versions, the author matched the questions from 1993 with those from 1999; those pairings and the wording of the questions are listed in Appendix A.

In several instances, the author also chose to analyze responses to questions that appeared only on NSOPF:99:

- questions 35 and 37 focused on the amount of time faculty spent teaching remedial courses;
- question 34 asked how many different courses the respondent taught (as opposed to number of sections he/she taught);
- questions 23 and 25 looked at job stability—how many years the respondent had taught in higher education and how many different positions he/she had held in that time;
- question 70 asked the respondent to select the most important factor that could induce him/her to leave teaching;
- question 72 asked whether the respondent had already retired from another position; and
- question 88 asked whether the respondent’s spouse was also employed in higher education.

Because each of these areas were of particular interest to this study, the author chose to include these questions in the analysis, though they had no counterparts in the 1993 version.

Data Alignment

Differences in the numbering systems and in some of the response options in NSOPF:93 and NSOPF:99 made it necessary to align the data from the two surveys so that comparisons could be made. Generally, because the 1999 survey was the more comprehensive of the two, the author worked to bring the 1993 variables in line with the structure of the 1999 variables. The exception to this rule came when the 1993 answers contained an undifferentiated category that was broken down into several smaller categories in the 1999 version; in those cases, the 1999 options were recombined to bring them into alignment with the 1993 version.

Actions taken to bring the NSOPF:93 and NSOPF:99 variables into alignment were as follows. Variables are listed by their 1999 labels, with the 1993 counterpart variables noted in brackets.

Q10 Employment, current: Tenure status, collapsed [a7, 1993]

1993 answer contained the options

“4. No tenure system for my faculty status”

“5. No tenure system at this institution”

These two options were collapsed; both were coded as

“4. No tenure system at this institution”

Q11 Employment, current: Duration of contract [a8, 1993]

1993 options recoded to align with 1999 version:

“1. One academic term” recoded to 2

“2. One academic calendar year” recoded to 3

“3. A limited number of years” recoded to 4

“4. Unspecified duration” recoded to 1

Q16A1 Education: Highest degree [b16a1, 1993]

1999 answer contained the options

“3. Master’s of Fine Arts, Master’s of Social Work”

“4. Other master’s degrees”

These two options were collapsed; both were coded as

“3. Master’s degree or equivalent”

One other 1999 option was recoded to align with 1993 version:

“5. Bachelor’s degree” recoded to 4

Q20 Employment, current: Other employment, consulting [b17, 1993]

Q21 Employment, current: Other employment, non-consulting [b17, 1993]

1999 questions were collapsed to align with 1993 version.

1999 answer options were recoded to align with 1993 version:

“1. Yes” recoded to 2

“2. No” recoded to 1

Q31A1 Workload: Time actually spent at teaching undergraduates [c37aa, 1993]

Q31A2 Workload: Time actually spent at teaching graduates [c37aa, 1993]

Derived variable (Q31A1 + Q31A2) was created to align with 1993 version.
“c37aa. Time actually spent teaching”

Q31B1 Workload: Time preferred at teaching undergraduates [c37ba, 1993]

Q31B2 Workload: Time preferred at teaching graduates [c37ba, 1993]

Derived variable (Q31B1 + Q31B2) was created to align with 1993 version.
“c37ba. Time preferred spent teaching”

Q32A1 Instruction, committees: Served on, number undergrad committees [c21, 1993]

1993 survey offered three categories:

“c21a1. Undergraduate thesis or dissertation committees”

“c21a2. Undergraduate comprehensive exams or orals committees”

“c21a3. Undergraduate exam/certification committees”

Derived variable (c21a1 + c21a2 + c21a3) was created to align with 1999 version’s single category.

Q32A2 Instruction, committees: Served on, number graduate committees [c21, 1993]

1993 survey offered three categories:

“c21a4. Graduate thesis or dissertation committees”

“c21a5. Graduate comprehensive exams or orals committees”

“c21a6. Graduate exam/certification committees”

Derived variable (c21a4 + c21a5 + c21a6) was created to align with 1999 version’s single category.

Q32B1 Instruction, committees: Chaired, undergrad committees [c21, 1993]

1993 survey offered three categories:

“c21b1. Undergraduate thesis or dissertation committees”

“c21b2. Undergraduate comprehensive exams or orals committees”

“c21b3. Undergraduate exam/certification committees”

Derived variable (c21b1 + c21b2 + c21b3) was created to align with 1999 version’s single category.

Q32B2 Instruction, committees: Chaired, graduate committees [c21, 1993]

1993 survey offered three categories:

“c21b4. Graduate thesis or dissertation committees”

“c21b5. Graduate comprehensive exams or orals committees”

“c21b6. Graduate exam/certification committees”

Derived variable (c21b4 + c21b5 + c21b6) was created to align with 1999 version’s single category.

Q49A1 Instruction, individual: Number of undergraduate students [c25, 1993]

1993 survey offered the categories:

“c25a1. Lower division students”

“c25a2. Upper division students”

Derived variable (c25a1 + c25a2) was created to align with 1999 version’s single category.

Q49A2 Instruction, individual: Contact hrs/wk, undergraduate students [c25, 1993]

1993 survey offered the categories:

“c25b1. Lower division students”

“c25b2. Upper division students”

Derived variable (c25b1 + c25b2) was created to align with 1999 version’s single category.

Q53 Research: Any creative work/writing/research, type [c29, 1993]

1993 options recoded to align with 1999 version:

“3. Policy-oriented research or analysis” recoded to 2

“4. Literary or expressive” recoded to 3

“5. Program/curriculum design and development” recoded to 4

“6. Other” recoded to 5

“Legitimate skip” recoded to -4

Q60A Rating: Basic research equipment/instruments [c34a, 1993]

Q60B Rating: Laboratory space and supplies [c34b, 1993]

Q60D Rating: Availability of research assistants [c34c, 1993]

Q60E Rating: Personal computers and local networks [c34d, 1993]

Q60F Rating: Centralized computer facilities [c34e, 1993]

Q60G Rating: Internet connections [c34f, 1993]

Q60I Rating: Audiovisual equipment [c34g, 1993]

Q60J Rating: Classroom space [c34h, 1993]

Q60K Rating: Office space [c34i, 1993]

Q60M Rating: Secretarial support [c34k, 1993]

Q60N Rating: Library holdings [c34l, 1993]

On both the 1993 and the 1999 versions, a four-point Likert scale was offered for these questions. On the 1993 version, the options were labeled “1. Very poor, 2. Poor, 3. Good, 4. Very good.” On the 1999 version, the options were labeled “1. Poor, 2. Fair, 3. Good, 4. Excellent.” The two scales were judged to be roughly equivalent and were therefore treated as comparable values.

Q61A Professional development: Internal tuition remission funds [c35a1 & c35b1, 1993]

1993 options were collapsed and recoded to align with 1999 version:

c35b1 “1. Yes” recoded to 1

c35b1 “2. No” recoded to 2

c35a1 “2. No” recoded to 3

c35a1 “DK. Don’t know” recoded to 4

Q61B Professional development: Internal prof. assn. funds [c35a2 & c35b2, 1993]

1993 options were collapsed and recoded to align with 1999 version:

- c35b2 "1. Yes" recoded to 1
- c35b2 "2. No" recoded to 2
- c35a2 "2. No" recoded to 3
- c35a2 "DK. Don't know" recoded to 4

Q61C Professional development: Internal prof. travel funds [c35a3 & c35b3, 1993]

1993 options were collapsed and recoded to align with 1999 version:

- c35b3 "1. Yes" recoded to 1
- c35b3 "2. No" recoded to 2
- c35a3 "2. No" recoded to 3
- c35a3 "DK. Don't know" recoded to 4

Q61D Professional development: Internal training to improve [c35a4 & c35b4, 1993]

1993 options were collapsed and recoded to align with 1999 version:

- c35b4 "1. Yes" recoded to 1
- c35b4 "2. No" recoded to 2
- c35a4 "2. No" recoded to 3
- c35a4 "DK. Don't know" recoded to 4

Q61F Professional development: Internal sabbatical leave [c35a6 & c35b6, 1993]

1993 options were collapsed and recoded to align with 1999 version:

- c35b6 "1. Yes" recoded to 1
- c35b6 "2. No" recoded to 2
- c35a6 "2. No" recoded to 3
- c35a6 "DK. Don't know" recoded to 4

Q76 Income [e47, 1993]

1999 NCES derived variable "x04_76 Compensation: Total income from the institution" was selected for this area. For a comparable 1993 figure, a derived variable (x01E47 + x03E47) was created from two NCES derived variables:

- "x01E47 Compensation: Basic salary from institution"
- "x03E47 Compensation: Other income from institution"

Q82Y Demographics, age [f52, 1993]

Two NCES derived variables were used for this question:
for the 1993 data, "x02F52 Demographics, age"
for the 1999 data, "x02_82 Demographics, age"

Q84 Demographics, race [f53, 1993]

Two NCES derived variables were used for this question:
for the 1993 data, "x02F53 Demographics, race"
for the 1999 data, "x03_84 Demographics, race"

Q87 Demographics: Marital status [f55, 1993]

1993 answer contained the options

“4. Separated”

“5. Divorced”

“6. Widowed”

These three options were collapsed to align them with the 1999 version: all were coded as

“4. Separated, divorced, or widowed”

Statistical Procedures

The research questions called for the data to be analyzed in several ways. The first three research questions called for a summary of the data:

1. What is the nature of the intrinsic factors computer science faculty members experience working at four-year colleges and universities?
2. What is the nature of the extrinsic factors computer science faculty members experience working at four-year colleges and universities?
3. What is the demographic profile of the computer science faculty members surveyed in NSOPF:93 and NSOPF:99?

To answer these questions, the author used SPSS 11.5 to create simple frequency tables that tallied the number of responses for each answer and showed the mean and standard deviation for each question.

The remaining research questions called for a different sort of analysis:

4. Are there differences in the reported working conditions experienced by computer science faculty members at research universities and doctorate-granting universities when compared with those of faculty at other four-year institutions?
5. Were the working conditions reported by computer science faculty members in NSOPF:93 different from those reported by computer science faculty members in NSOPF:99?

To answer these questions, it was necessary to divide the data according to the date of the survey and the Carnegie classification of the faculty member's institution; various responses of these subgroups were then paired and tested for differences in means, using an independent samples t-test.

When the faculty responses were divided into two subgroups (research and doctoral institutions vs. comprehensive and liberal arts institutions for research question 4; 1993 responses vs 1999 responses for research question 5) and then analyzed for differences, it introduced the possibility of a Type I error. Because the tallies were based on *samples* of the populations and did not include answers from every computer science professor in the United States, they represented *estimates* of how the entire population would answer these questions. Observed differences between such estimates can reflect either of two possibilities: differences that exist in the population at large, or differences due solely to the composition of the sample (but that are not representative of the population at large). The independent samples t-test makes it possible to minimize the risk of erroneously interpreting sampling differences as population differences. The independent samples t-test computes the difference between a pair of means with the formula

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}}$$

where E_1 and E_2 are the means to be compared, and se_1 and se_2 are their corresponding standard errors. Statistical significance was determined by calculating t values for differences between pairs of subgroup means and comparing these with published values for t for two-tailed hypothesis testing, using a 5 percent probability of a Type I error (a significance level of .05). The independent t-test was the appropriate test for analyzing the differences between the groups in the study; it is the method most commonly used in education to measure the differences in the means of two groups that are known to differ with respect to one variable, to measure whether differing responses on a second variable could be associated with differences on the first variable (McMillan & Schumacher, 1997).

The descriptive statistics for each question showed mean scores for the subgroups, and a rough comparison could be done by looking at these numbers. However, to assess the statistical significance of such a difference, it must be assumed that the variance (degree of spread) for scores for each variable must be roughly equal. To check this assumption,

Levene's test was used. Levene's test uses the absolute value of the difference between each measurement in a treatment and the treatment mean. The test rests on the premise that the variances of the treatments are equal if the means of the absolute values are equal. The null hypothesis for Levene's test is that the variances are equal, while the alternative hypothesis is that at least one variance differs. (This is thus a two-tailed test, because the null hypothesis does not specify a direction—only the condition of equality.) The output from this test shows these alternative hypotheses on two lines—one labeled "Equal Variances Assumed" and the second labeled "Equal variances not assumed."

The Levene's test produced, for each comparison of means, an "F value" and then indicated whether the value was significant (i.e., $p < 0.05$). If the Levene's test produced a non-significant result ($p > 0.05$), then the line on the summary table labeled "Equal variances assumed" was used to further interpret the statistical significance of the means' difference. If the Levene's test revealed a significant result, then the second line, labeled "Equal variances not assumed" was used. (In such instances, the statistics on line two were adjusted by SPSS to correct for the lack of homogeneity of variance.)

Once the equality of variances was tested, the t value, degree of freedom, and p value were computed accordingly; also calculated was a confidence interval for each difference analyzed, using a standard 95 percent confidence, to show the range of possible mean differences that could be produced with repeated samplings. A statistically significant difference in the means of the two selected groups was deduced when the p value for the comparison [listed in the column labeled "Sig. (2-tailed)"] was less than 0.05.

Summary

Data from the National Study of Postsecondary Faculty's 1993 and 1999 surveys were used in this study to document the working conditions and attitudes of computer science faculty members at four-year colleges and universities across the United States. Because the NSOPF's design and procedures for collection had already met rigorous research standards

that were checked and double-checked by the National Center of Education Statistics research teams, the data were known to be reliable sources for information on this population. The author filtered the survey data to obtain a specialized data set that fell within the parameters outlined for the study; SPSS 11.5 was then used to analyze the data set, to produce descriptive summaries of the data and statistical analyses of differences in means between subgroups. The resulting tables of information provided statistical information needed to answer the five research questions outlined for the study.

CHAPTER FOUR

Analysis and Findings

Introduction

Data from the National Study of Postsecondary Faculty 1993 and National Study of Postsecondary Faculty 1999 were filtered and analyzed in an effort to answer five research questions. The first three research questions called for a broad summary of the data:

1. What is the nature of the intrinsic factors computer science faculty members experience working at four-year colleges and universities?
2. What is the nature of the extrinsic factors computer science faculty members experience working at four-year colleges and universities?
3. What is the demographic profile of the computer science faculty members surveyed in NSOPF:93 and NSOPF:99?

To answer these questions, the author filtered the database for each version of the survey to isolate the responses of full-time faculty from four-year colleges and universities whose primary activity was teaching “for credit” courses in the areas of computer and information sciences, computer programming, data processing, systems analysis, or other computer science topics. The responses given by these computer science faculty members to specific questions were then tabulated as a group; means and standard deviations were then calculated for all questions where the responses were offered on an interval scale.

The remaining research questions called for a division of the data into subgroups:

4. Are there differences in the reported working conditions experienced by computer science faculty members at research universities and doctorate-granting universities when compared with those of faculty at other four-year institutions?
5. Were the working conditions reported by computer science faculty members in NSOPF:93 different from those reported by computer science faculty members in NSOPF:99?

To answer these questions, it was necessary to sort the responses according to the date of the survey and the Carnegie classification of the faculty member's institution; various responses of these subgroups were then paired and tested for differences in means, using an independent samples t-test.

Intrinsic Factors

To answer the research question, "What is the nature of the intrinsic factors computer science faculty members experience working at four-year colleges and universities?," responses to questions relating to faculty perceptions of and emotional responses to their work environment were analyzed. Frequency tables for the following questions were created to provide information on intrinsic factors. The data were then cross-tabulated for each question, to show the frequencies of responses when subdivided by type of institution and year of survey.

Nature of the Work

- How many hours per week did you spend on paid activity at your institution?
(Tables 3, 107A, 107B)
- How many hours per week did you spend on unpaid activity at your institution?
(Tables 4, 108A, 108B)
- How many hours per week did you spend on paid activity outside your institution?
(Tables 5, 109A, 109B)
- How many hours per week did you spend on unpaid activity outside your institution?
(Tables 6, 110A, 110B)
- What percent of your time do you spend . . .
 - teaching? (Tables 7, 111A, 111B)
 - in research/scholarship activities? (Tables 8, 112A, 112B)
 - in professional growth activities? (Tables 9, 113A, 113B)
 - in administration? (Tables 10, 114A, 114B)
 - on service activities? (Tables 11, 115A, 115B)
 - on consulting? (Tables 12, 116A, 116B)
- What percent of your time would you prefer to spend . . .
 - teaching? (Tables 13, 117A, 117B)
 - in research/scholarship activities? (Tables 14, 118A, 118B)

- What percent of your time would you prefer to spend . . .
 - in professional growth activities? (Tables 15, 119A, 119B)
 - in administration? (Tables 16, 120A, 120B)
 - on service activities? (Tables 17, 121A, 121B)
 - on consulting? (Tables 18, 122A, 122B)
- How many undergraduate committees did you serve on during the fall term? (Tables 19, 123A, 123B)
- How many graduate committees did you serve on during the fall term? (Tables 20, 124A, 124B)
- How many undergraduate committees did you chair during the fall term? (Tables 21, 125A, 125B)
- How many graduate committees did you chair during the fall term? (Tables 22, 126A, 126B)
- How many classes or sections did you teach during the fall term? (Tables 23, 127A, 127B)
- How many different courses did you teach during the fall term? (Tables 24, 128)
- How many of the classes you taught in the fall were remedial? (Tables 25, 129)
- How many of the classes you taught in the fall were continuing education? (Tables 26, 130)
- How many scheduled office hours did you have per week? (Tables 27, 131A, 131B)

Opportunities for Research, Personal Growth

- Were you engaged in any professional research, proposal writing, creative writing, or creative works during the fall term? (Tables 28, 132A, 132B)
- What type of professional research, proposal writing, or creative work did you do? (Tables 29, 133A, 133B)
- During this term, were you engaged in any funded research or funded creative work? (Tables 30, 134A, 134B)
- During this term, were you a principal investigator or co-principal investigator for any grants or contracts? (Tables 31, 135A, 135B)

- During the past two years, did you use institutional funds for...
 - tuition remission? (Tables 32, 136A, 136B)
 - professional association memberships or registration fees? (Tables 33, 137A, 137B)
 - professional travel? (Tables 34, 138A, 138B)
 - training to improve research or teaching skills? (Tables 35, 139A, 139B)
 - sabbatical leave? (Tables 36, 140A, 140B)

Satisfaction with Opportunities Afforded

- How satisfied are you with ...
 - the authority you have to make decisions about the content of your courses? (Tables 37, 141A, 141B)
 - the authority you have to decide what courses you will teach? (Tables 38, 142A, 142B)
 - the authority you have to make other job decisions? (Tables 39, 143A, 143B)
 - the time you have available to advise students? (Tables 40, 144A, 144B)
 - the quality of the undergraduate students whom you have taught? (Tables 41, 145A, 145B)
 - the quality of the graduate students whom you have taught? (Tables 42, 146A, 146B)
 - your workload? (Tables 43, 147A, 147B)
 - opportunities for advancement in rank at your institution? (Tables 44, 148A, 148B)
 - time available for keeping current in your field? (Tables 45, 149A, 149B)
 - freedom to do outside consulting? (Tables 46, 150A, 150B)
 - your job overall? (Tables 47, 151A, 151B)

Factors Which Could Induce Faculty to Take a Different Job

- If you were to leave your current position to accept another position inside or outside of academia, how important would these factors be in your decision?
 - opportunities for advancement (Tables 48, 152A, 152B)
 - no pressure to publish (Tables 49, 153A, 153B)
 - greater opportunity to teach (Tables 50, 154A, 154B)
 - greater opportunity to do research (Tables 51, 155A, 155B)

Extrinsic Factors

To answer the research question, "What is the nature of the extrinsic factors computer science faculty members experience working at four-year colleges and universities?," responses

to questions relating to the external working conditions of computer science faculty were analyzed. Frequency tables for the following questions were created to provide information on extrinsic factors. The data were then cross-tabulated for each question, to show the frequencies of responses when subdivided by type of institution and year of survey.

Rank, Tenure, Contracts

- What is your academic rank, title, or position? (Tables 52, 156A, 156B)
- What is your tenure status? (Tables 53, 157A, 157B)
- What is the duration of your present contract? (Tables 54, 158A, 158B)

Job Stability

- How long have you held your current job? (Tables 55, 159A, 159B)
- In total, how many professional positions in higher education institutions have you held? (Tables 56, 160)
- How many years have you been teaching in higher education institutions? (Tables 57, 161)

Consulting, Other Outside Employment

- Do you do outside consulting in addition to your employment at this institution? (Tables 58, 162A, 162B)
- How many different jobs, other than your employment at this institution or consulting jobs, did you have this term? (Tables 59, 163A, 163B)

Facilities and Resources Available

- How satisfied are you with . . .
 - basic research equipment or instruments? (Tables 60, 164A, 164B)
 - laboratory or research space and supplies? (Tables 61, 165A, 165B)
 - availability of research assistants? (Tables 62, 166A, 166B)
 - personal computers and local networks? (Tables 63, 167A, 167B)

- How satisfied are you with . . .
 - centralized (main frame) computer facilities? (Tables 64, 168A, 168B)
 - Internet connections? (Tables 65, 169A, 169B)
 - audio-visual equipment? (Tables 66, 170A, 170B)
 - classroom space? (Tables 67, 171A, 171B)
 - office space? (Tables 68, 172A, 172B)
 - secretarial support? (Tables 69, 173A, 173B)
 - library holdings? (Tables 70, 174A, 174B)

Salary, Benefits, Job Security

- How satisfied are you with . . .
 - your job security? (Tables 71, 175A, 175B)
 - your salary? (Tables 72, 176A, 176B)
 - your benefits, generally? (Tables 73, 177A, 177B)
 - employment opportunities for your spouse? (Tables 74, 178A, 178B)

Factors Which Could Induce Faculty to Take a Different Job

- If you were to leave your current position to accept another position inside or outside of academia, how important would these factors be in your decision?
 - salary level (Tables 75, 179A, 179B)
 - tenure-track or tenured position (Tables 76, 180A, 180B)
 - job security (Tables 77, 181A, 181B)
 - benefits (Tables 78, 182A, 182B)
 - good research facilities and equipment (Tables 79, 183A, 183B)
 - good instructional facilities and equipment (Tables 80, 184A, 184B)
 - good job opportunities for your spouse or partner (Tables 81, 185A, 185B)
 - good geographic location (Tables 82, 186A, 186B)
 - good environment or schools for your children (Tables 83, 187A, 187B)

Current Salary, Other Income

- What is your total income that you earn from your institution? (Tables 84, 188A, 188B)
- What is your total personal income from all sources? (Tables 85, 189A, 189B)
- What is your total household income? (Tables 86, 190A, 190B)

Demographic Factors

To answer the research question, “What is the demographic profile of the computer science faculty members surveyed in NSOPF:93 and NSOPF:99?,” responses to questions relating to the respondents’ characteristics and general plans for employment were analyzed. Frequency tables for the following questions were created to provide information on demographic factors. The data were then cross-tabulated for each question, to show the frequencies of responses when subdivided by type of institution and year of survey.

Educational Background

- What is the highest degree that you have received? (Tables 87, 191A, 191B)
- What is the field in which you received this degree? (Tables 88, 192A, 192B)

Gender, Age, Ethnicity, Marital Status

- Are you male or female? (Tables 89, 193A, 193B)
- What is your age? (Tables 90, 194A, 194B)
- What is your race? (Tables 91, 195A, 195B)
- What is your marital status? (Tables 92, 196A, 196B)
- Is your spouse employed in higher education? (Tables 93, 197)
- In what country were you born? (Tables 94, 198A, 198B)
- What is your citizenship status? (Tables 95, 199A, 199B)

Plans for Future Work, Retirement

- How likely are you to accept a part-time job at another postsecondary institution in the next three years? (Tables 96, 200A, 200B)
- How likely are you to accept a full-time job at another postsecondary institution in the next three years? (Tables 97, 201A, 201B)

- How likely are you to accept a part-time job somewhere other than a postsecondary institution in the next three years? (Tables 98, 202A, 202B)
- How likely are you to accept a full-time job somewhere other than a postsecondary institution in the next three years? (Tables 99, 203A, 203B)
- How likely are you to retire in the next three years? (Tables 100, 204A, 204B)
- At what age do you think you are most likely to stop working at a postsecondary institution? (Tables 101, 205A, 205B)
- If you could elect to draw on your retirement and still work at this institution on a part-time basis, would you do so? (Tables 102, 206A, 206B)
- Have you retired from another position? (Tables 103, 207)
- If an early retirement option were offered to you at this institution, would you take it? (Tables 104, 208A, 208B)
- At what age do you think you are most likely to retire from all paid employment? (Tables 105, 209A, 209B)
- If you were to decide to take another job outside or inside academia, what factor would be most important in your decision to leave? (Tables 106, 210)

The frequency tables for all of the intrinsic, extrinsic, and demographic questions are presented on the following pages. (The mean and standard deviation for each set of responses are listed in the notes below each table.) In the section following these tables, crosstabulated results are presented for each of the intrinsic, extrinsic, and demographic questions. These tables make it possible to see how responses varied between the faculty at different types of institutions (research institutions, doctorate-granting universities, comprehensive universities, and liberal arts colleges) and between the different years in which the surveys were conducted (1993 and 1999). After these two sections of tables, discussion resumes on page 215 on the independent samples t-tests done to determine whether there were statistically significant differences between the computer science faculty responses from elite institutions and those of faculty from other institutions.

Table 3
Hours Per Week Paid Activities at Institution

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	2	.6	.6
	1	1	.3	.9
	3	1	.3	1.2
	4	1	.3	1.4
	8	1	.3	1.7
	14	1	.3	2.0
	15	1	.3	2.3
	16	1	.3	2.6
	17	1	.3	2.9
	18	1	.3	3.2
	20	6	1.7	4.9
	24	3	.9	5.8
	25	4	1.2	6.9
	28	3	.9	7.8
	30	16	4.6	12.4
	32	1	.3	12.7
	33	2	.6	13.3
	34	2	.6	13.8
	35	18	5.2	19.0
	38	1	.3	19.3
	40	77	22.2	41.5
	41	2	.6	42.1
	42	4	1.2	43.2
	43	1	.3	43.5
	45	28	8.1	51.6
	47	1	.3	51.9
	48	2	.6	52.4
	50	82	23.6	76.1
	52	4	1.2	77.2
	53	1	.3	77.5
	54	1	.3	77.8
	55	18	5.2	83.0
	58	1	.3	83.3
	60	40	11.5	94.8
	62	1	.3	95.1
	63	1	.3	95.4
	65	9	2.6	98.0
	66	1	.3	98.3
	70	4	1.2	99.4
	84	1	.3	99.7
	100	1	.3	100.0
Total	347	100.0	100.0	

a. Mean = 45.14, Standard Deviation = 12.696

Table 4
Hours Per Week Unpaid Activities at Institution

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	189	54.5	54.5	54.5
	1	7	2.0	2.0	56.5
	2	25	7.2	7.2	63.7
	3	13	3.7	3.7	67.4
	4	6	1.7	1.7	69.2
	5	34	9.8	9.8	79.0
	6	5	1.4	1.4	80.4
	8	3	.9	.9	81.3
	9	1	.3	.3	81.6
	10	38	11.0	11.0	92.5
	12	4	1.2	1.2	93.7
	15	2	.6	.6	94.2
	16	1	.3	.3	94.5
	20	14	4.0	4.0	98.6
	25	2	.6	.6	99.1
	30	2	.6	.6	99.7
	40	1	.3	.3	100.0
	Total	347	100.0	100.0	

a. Mean = 3.62, Standard Deviation = 5.987

Table 5
Hours Per Week Paid Activities Not at Institution

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	251	72.3	72.3	72.3
	1	7	2.0	2.0	74.4
	2	18	5.2	5.2	79.5
	3	2	.6	.6	80.1
	4	6	1.7	1.7	81.8
	5	15	4.3	4.3	86.2
	6	2	.6	.6	86.7
	8	7	2.0	2.0	88.8
	10	17	4.9	4.9	93.7
	12	2	.6	.6	94.2
	13	1	.3	.3	94.5
	15	2	.6	.6	95.1
	17	1	.3	.3	95.4

(table continues)

Table 5 (continued)

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
	20	7	2.0	97.4
	25	1	.3	97.7
	30	3	.9	98.6
	32	1	.3	98.8
	35	1	.3	99.1
	40	2	.6	99.7
	45	1	.3	100.0
Total	347	100.0	100.0	

a. Mean = 2.64, Standard Deviation = 6.619

Table 6

Hours Per Week Unpaid Activity: Not at Institution

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	232	66.9	66.9
	1	26	7.5	74.4
	2	31	8.9	83.3
	3	11	3.2	86.5
	4	4	1.2	87.6
	5	22	6.3	93.9
	6	6	1.7	95.7
	8	5	1.4	97.1
	9	1	.3	97.4
	10	6	1.7	99.1
	12	1	.3	99.4
	20	2	.6	100.0
Total	347	100.0	100.0	

a. Mean = 1.28, Standard Deviation = 2.664

Table 7
Time Actually Spent Teaching

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	10	.3	.3	.3
	13	.3	.3	.6
	18	.3	.3	.9
	20	1.2	1.2	2.0
	25	1.7	1.7	3.7
	28	.6	.6	4.3
	30	2.9	2.9	7.2
	33	.6	.6	7.8
	35	2.0	2.0	9.8
	40	20	5.8	15.6
	43	.3	.3	15.9
	45	7	2.0	17.9
	48	.3	.3	18.2
	50	38	11.0	29.1
	54	2	.6	29.7
	55	8	2.3	32.0
	56	2	.6	32.6
	59	1	.3	32.9
	60	28	8.1	40.9
	64	1	.3	41.2
	65	13	3.7	45.0
	66	4	1.2	46.1
	67	1	.3	46.4
	68	1	.3	46.7
	70	35	10.1	56.8
	72	2	.6	57.3
	73	1	.3	57.6
	74	1	.3	57.9
	75	23	6.6	64.6
	79	2	.6	65.1
	80	44	12.7	77.8
	83	2	.6	78.4
	84	1	.3	78.7
	85	12	3.5	82.1
	88	4	1.2	83.3
	89	1	.3	83.6
	90	23	6.6	90.2
	91	2	.6	90.8
	92	1	.3	91.1
	93	1	.3	91.4
	94	2	.6	91.9

(table continues)

Table 7 (continued)

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
95	8	2.3	2.3	94.2
98	1	.3	.3	94.5
99	1	.3	.3	94.8
100	18	5.2	5.2	100.0
Total	347	100.0	100.0	

a. Mean = 66.25, Standard Deviation = 20.657

Table 8

Time Actually Spent at Research

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	101	29.1	29.1
	1	3	.9	30.0
	2	9	2.6	32.6
	3	5	1.4	34.0
	4	2	.6	34.6
	5	41	11.8	46.4
	6	5	1.4	47.8
	7	2	.6	48.4
	9	1	.3	48.7
	10	45	13.0	61.7
	11	1	.3	62.0
	12	5	1.4	63.4
	13	2	.6	64.0
	15	15	4.3	68.3
	17	1	.3	68.6
	18	2	.6	69.2
	19	2	.6	69.7
	20	28	8.1	77.8
	22	3	.9	78.7
	23	2	.6	79.3
	25	17	4.9	84.1
	28	1	.3	84.4
	29	1	.3	84.7
	30	16	4.6	89.3
	35	7	2.0	91.4
	40	16	4.6	96.0
	43	1	.3	96.3
	44	1	.3	96.5
	45	3	.9	97.4

(table continues)

Table 8 (continued)

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
50	5	1.4	1.4	98.8
60	1	.3	.3	99.1
67	1	.3	.3	99.4
75	2	.6	.6	100.0
Total	347	100.0	100.0	

a. Mean = 12.78, Standard Deviation = 14.407

Table 9

Time Actually Spent on Professional Growth

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	153	44.1	44.1
	1	5	1.4	45.5
	2	13	3.7	49.3
	3	10	2.9	52.2
	4	4	1.2	53.3
	5	57	16.4	69.7
	6	3	.9	70.6
	7	5	1.4	72.0
	8	1	.3	72.3
	9	1	.3	72.6
	10	57	16.4	89.0
	11	1	.3	89.3
	12	2	.6	89.9
	13	2	.6	90.5
	15	6	1.7	92.2
	18	1	.3	92.5
	20	14	4.0	96.5
	23	1	.3	96.8
	25	4	1.2	98.0
	30	2	.6	98.6
	34	1	.3	98.8
	35	1	.3	99.1
	40	3	.9	100.0
Total	347	100.0	100.0	

a. Mean = 5.25, Standard Deviation = 7.27

Table 10
Time Actually Spent at Administration

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	128	36.9	36.9	36.9
	1	5	1.4	1.4	38.3
	2	4	1.2	1.2	39.5
	3	4	1.2	1.2	40.6
	4	5	1.4	1.4	42.1
	5	47	13.5	13.5	55.6
	6	5	1.4	1.4	57.1
	7	4	1.2	1.2	58.2
	8	1	.3	.3	58.5
	9	2	.6	.6	59.1
	10	62	17.9	17.9	76.9
	13	3	.9	.9	77.8
	14	1	.3	.3	78.1
	15	12	3.5	3.5	81.6
	16	2	.6	.6	82.1
	17	1	.3	.3	82.4
	18	2	.6	.6	83.0
	19	1	.3	.3	83.3
	20	20	5.8	5.8	89.0
	23	1	.3	.3	89.3
	25	9	2.6	2.6	91.9
	26	1	.3	.3	92.2
	28	1	.3	.3	92.5
	30	7	2.0	2.0	94.5
	35	2	.6	.6	95.1
	36	1	.3	.3	95.4
	40	7	2.0	2.0	97.4
	50	5	1.4	1.4	98.8
	55	1	.3	.3	99.1
	57	1	.3	.3	99.4
	60	1	.3	.3	99.7
	70	1	.3	.3	100.0
	Total	347	100.0	100.0	

a. Mean = 8.97, Standard Deviation = 11.969

Table 11
Time Actually Spent on Service Activity

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	189	54.5	54.5	54.5
	1	11	3.2	3.2	57.6
	2	11	3.2	3.2	60.8
	3	8	2.3	2.3	63.1
	4	5	1.4	1.4	64.6
	5	52	15.0	15.0	79.5
	6	2	.6	.6	80.1
	8	3	.9	.9	81.0
	9	1	.3	.3	81.3
	10	37	10.7	10.7	91.9
	11	2	.6	.6	92.5
	12	1	.3	.3	92.8
	13	1	.3	.3	93.1
	15	7	2.0	2.0	95.1
	18	1	.3	.3	95.4
	20	4	1.2	1.2	96.5
	22	2	.6	.6	97.1
	25	6	1.7	1.7	98.8
	30	3	.9	.9	99.7
	60	1	.3	.3	100.0
	Total	347	100.0	100.0	

a. Mean = 3.88, Standard Deviation = 6.672

Table 12
Time Actually Spent on Consulting

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	252	72.6	72.6	72.6
	1	9	2.6	2.6	75.2
	2	11	3.2	3.2	78.4
	3	4	1.2	1.2	79.5
	4	1	.3	.3	79.8
	5	32	9.2	9.2	89.0
	6	2	.6	.6	89.6
	10	12	3.5	3.5	93.1
	11	2	.6	.6	93.7
	12	1	.3	.3	93.9
	15	2	.6	.6	94.5

(table continues)

Table 12 (continued)

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
20	9	2.6	2.6	97.1
25	1	.3	.3	97.4
29	1	.3	.3	97.7
30	2	.6	.6	98.3
35	1	.3	.3	98.6
36	1	.3	.3	98.8
40	1	.3	.3	99.1
50	1	.3	.3	99.4
60	1	.3	.3	99.7
80	1	.3	.3	100.0
Total	347	100.0	100.0	

a. Mean = 2.88, Standard Deviation = 8.264

Table 13

Time Preferred at Teaching

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid 0	2	.6	.6	.6
10	2	.6	.6	1.2
18	2	.6	.6	1.7
20	7	2.0	2.0	3.7
24	1	.3	.3	4.0
25	10	2.9	2.9	6.9
30	22	6.3	6.3	13.3
33	2	.6	.6	13.8
35	4	1.2	1.2	15.0
37	1	.3	.3	15.3
38	1	.3	.3	15.6
40	35	10.1	10.1	25.6
43	1	.3	.3	25.9
45	11	3.2	3.2	29.1
50	58	16.7	16.7	45.8
51	1	.3	.3	46.1
52	2	.6	.6	46.7
53	2	.6	.6	47.3
54	3	.9	.9	48.1
55	10	2.9	2.9	51.0
56	1	.3	.3	51.3
57	1	.3	.3	51.6

(table continues)

Table 13 (continued)

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
58	2	.6	.6	52.2
60	39	11.2	11.2	63.4
63	1	.3	.3	63.7
64	1	.3	.3	64.0
65	8	2.3	2.3	66.3
66	2	.6	.6	66.9
67	2	.6	.6	67.4
70	24	6.9	6.9	74.4
73	1	.3	.3	74.6
74	1	.3	.3	74.9
75	19	5.5	5.5	80.4
76	1	.3	.3	80.7
77	1	.3	.3	81.0
78	1	.3	.3	81.3
79	2	.6	.6	81.8
80	21	6.1	6.1	87.9
85	8	2.3	2.3	90.2
86	1	.3	.3	90.5
88	4	1.2	1.2	91.6
89	1	.3	.3	91.9
90	7	2.0	2.0	93.9
91	1	.3	.3	94.2
93	1	.3	.3	94.5
95	2	.6	.6	95.1
96	1	.3	.3	95.4
98	1	.3	.3	95.7
99	1	.3	.3	96.0
100	14	4.0	4.0	100.0
Total	347	100.0	100.0	

a. Mean = 57.43, Standard Deviation = 20.874

Table 14
Time Preferred at Research

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	59	17.0	17.0	17.0
	1	8	2.3	2.3	19.3
	2	1	.3	.3	19.6
	3	1	.3	.3	19.9
	4	1	.3	.3	20.2
	5	19	5.5	5.5	25.6
	7	4	1.2	1.2	26.8
	8	2	.6	.6	27.4
	9	1	.3	.3	27.7
	10	44	12.7	12.7	40.3
	11	2	.6	.6	40.9
	12	3	.9	.9	41.8
	13	1	.3	.3	42.1
	15	18	5.2	5.2	47.3
	17	1	.3	.3	47.6
	18	2	.6	.6	48.1
	19	1	.3	.3	48.4
	20	32	9.2	9.2	57.6
	22	1	.3	.3	57.9
	25	20	5.8	5.8	63.7
	26	1	.3	.3	64.0
	27	1	.3	.3	64.3
	28	3	.9	.9	65.1
	30	38	11.0	11.0	76.1
	33	2	.6	.6	76.7
	35	6	1.7	1.7	78.4
	36	2	.6	.6	79.0
	40	29	8.4	8.4	87.3
	44	1	.3	.3	87.6
	45	5	1.4	1.4	89.0
	50	20	5.8	5.8	94.8
	55	1	.3	.3	95.1
	57	1	.3	.3	95.4
	59	1	.3	.3	95.7
	60	6	1.7	1.7	97.4
	67	1	.3	.3	97.7
	70	5	1.4	1.4	99.1
	75	2	.6	.6	99.7
	100	1	.3	.3	100.0
	Total	347	100.0	100.0	

a. Mean = 21.42, Standard Deviation = 18.487

Table 15
Time Preferred on Professional Growth

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	89	25.6	25.6	25.6
	1	4	1.2	1.2	26.8
	2	1	.3	.3	27.1
	3	5	1.4	1.4	28.5
	4	1	.3	.3	28.8
	5	59	17.0	17.0	45.8
	6	3	.9	.9	46.7
	7	5	1.4	1.4	48.1
	8	4	1.2	1.2	49.3
	9	2	.6	.6	49.9
	10	87	25.1	25.1	74.9
	11	2	.6	.6	75.5
	12	1	.3	.3	75.8
	13	3	.9	.9	76.7
	14	4	1.2	1.2	77.8
	15	22	6.3	6.3	84.1
	18	1	.3	.3	84.4
	19	1	.3	.3	84.7
	20	30	8.6	8.6	93.4
	25	14	4.0	4.0	97.4
	26	1	.3	.3	97.7
	30	5	1.4	1.4	99.1
	35	1	.3	.3	99.4
	40	2	.6	.6	100.0
	Total	347	100.0	100.0	

a. Mean = 8.73. Standard Deviation = 8.014

Table 16
Time Preferred at Administration

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	169	48.7	48.7	48.7
	1	15	4.3	4.3	53.0
	2	7	2.0	2.0	55.0
	3	4	1.2	1.2	56.2
	4	4	1.2	1.2	57.3
	5	55	15.9	15.9	73.2
	7	5	1.4	1.4	74.6
	8	1	.3	.3	74.9
	9	3	.9	.9	75.8
	10	51	14.7	14.7	90.5
	13	1	.3	.3	90.8
	15	3	.9	.9	91.6
	20	5	1.4	1.4	93.1
	23	1	.3	.3	93.4
	25	5	1.4	1.4	94.8
	30	9	2.6	2.6	97.4
	35	1	.3	.3	97.7
40	4	1.2	1.2	98.8	
41	1	.3	.3	99.1	
45	1	.3	.3	99.4	
50	2	.6	.6	100.0	
	Total	347	100.0	100.0	

a. Mean = 5.39. Standard Deviation = 9.001

Table 17
Time Preferred on Service Activity

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	176	50.7	50.7	50.7
	1	16	4.6	4.6	55.3
	2	9	2.6	2.6	57.9
	3	5	1.4	1.4	59.4
	4	3	.9	.9	60.2
	5	71	20.5	20.5	80.7
	6	1	.3	.3	81.0
	7	2	.6	.6	81.6
	8	3	.9	.9	82.4
	9	2	.6	.6	83.0

(table continues)

Table 17 (continued)

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
10	46	13.3	13.3	96.3
11	1	.3	.3	96.5
15	5	1.4	1.4	98.0
20	2	.6	.6	98.6
22	1	.3	.3	98.8
25	1	.3	.3	99.1
29	1	.3	.3	99.4
33	1	.3	.3	99.7
35	1	.3	.3	100.0
Total	347	100.0	100.0	

a. Mean = 3.48, Standard Deviation = 5.132

Table 18

Time Preferred on Consulting

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	238	68.6	68.6
	1	5	1.4	70.0
	2	6	1.7	71.8
	3	5	1.4	73.2
	5	38	11.0	84.1
	7	2	.6	84.7
	8	1	.3	85.0
	9	1	.3	85.3
	10	23	6.6	91.9
	11	1	.3	92.2
	14	1	.3	92.5
	15	3	.9	93.4
	20	14	4.0	97.4
	23	1	.3	97.7
	25	2	.6	98.3
	37	1	.3	98.6
	50	3	.9	99.4
	61	1	.3	99.7
	80	1	.3	100.0
Total	347	100.0	100.0	

a. Mean = 3.56, Standard Deviation = 8.758

Table 19
Number of Undergraduate Committees Served On

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	289	83.3	83.3
	1	27	7.8	91.1
	2	10	2.9	93.9
	3	7	2.0	96.0
	4	5	1.4	97.4
	5	3	.9	98.3
	6	2	.6	98.8
	7	1	.3	99.1
	10	1	.3	99.4
	14	1	.3	99.7
	16	1	.3	100.0
Total	347	100.0	100.0	

a. Mean = .47, Standard Deviation = 1.597

Table 20
Number of Graduate Committees Served On

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	226	65.1	65.1
	1	21	6.1	71.2
	2	22	6.3	77.5
	3	18	5.2	82.7
	4	17	4.9	87.6
	5	9	2.6	90.2
	6	6	1.7	91.9
	7	1	.3	92.2
	8	3	.9	93.1
	10	4	1.2	94.2
	11	3	.9	95.1
	12	2	.6	95.7
	13	2	.6	96.3
	14	2	.6	96.8
	15	2	.6	97.4
	20	3	.9	98.3
	22	1	.3	98.6
	26	1	.3	98.8
	32	1	.3	99.1
	50	1	.3	99.4
	60	1	.3	99.7
	80	1	.3	100.0
Total	347	100.0	100.0	

a. Mean = 2.33, Standard Deviation = 7.101

Table 21
Number of Undergraduate Committees Chaired

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	316	91.1	91.1
	1	13	3.7	94.8
	2	7	2.0	96.8
	3	4	1.2	98.0
	4	5	1.4	99.4
	5	1	.3	99.7
	10	1	.3	100.0
Total	347	100.0	100.0	

a. Mean = .21, Standard Deviation = .877

Table 22
Number of Graduate Committees Chaired

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	279	80.4	80.4
	1	24	6.9	87.3
	2	12	3.5	90.8
	3	6	1.7	92.5
	4	5	1.4	93.9
	6	4	1.2	95.1
	7	2	.6	95.7
	8	5	1.4	97.1
	10	2	.6	97.7
	14	3	.9	98.6
	20	3	.9	99.4
	25	1	.3	99.7
	30	1	.3	100.0
Total	347	100.0	100.0	

a. Mean = .98, Standard Deviation = 3.377

Table 23
Total Classes Taught

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	4	1.2	1.2
	1	22	6.3	7.5
	2	85	24.5	32.0
	3	92	26.5	58.5
	4	97	28.0	86.5
	5	22	6.3	92.8
	6	6	1.7	94.5
	7	7	2.0	96.5
	8	3	.9	97.4
	9	2	.6	98.0
	10	2	.6	98.6
	11	1	.3	98.8
	12	1	.3	99.1
	16	1	.3	99.4
	20	2	.6	100.0
Total	347	100.0	100.0	

a. Mean = 3.44, Standard Deviation = 2.171

Table 24
Total Courses Taught

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	1	.3	.7
	1	21	6.1	15.4
	2	59	17.0	56.6
	3	37	10.7	82.5
	4	18	5.2	95.1
	5	6	1.7	99.3
	8	1	.3	100.0
Total	143	41.2	100.0	
Missing System	204	58.8		
Total	347	100.0		

a. Mean = 2.52, Standard Deviation = 1.144

Table 25
Remedial Classes Taught

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	134	38.6	93.7
	1	6	1.7	97.9
	2	1	.3	98.6
	3	1	.3	99.3
	4	1	.3	100.0
	Total	143	41.2	100.0
Missing System		204	58.8	
Total		347	100.0	

a. Mean = .10, Standard Deviation = .485

Table 26
Continuing Education Classes Taught

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	132	38.0	92.3
	1	7	2.0	97.2
	2	1	.3	97.9
	4	1	.3	98.6
	5	1	.3	99.3
	7	1	.3	100.0
	Total	143	41.2	100.0
Missing System		204	58.8	
Total		347	100.0	

a. Mean = .17, Standard Deviation = .825

Table 27
Total Office Hours Per Week

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	0	17	4.9	4.9
	1	7	2.0	6.9
	2	20	5.8	12.7
	3	39	11.2	23.9
	4	46	13.3	37.2
	5	59	17.0	54.2
	6	37	10.7	64.8
	7	9	2.6	67.4
	8	22	6.3	73.8
	9	12	3.5	77.2
	10	49	14.1	91.4
	11	1	.3	91.6
	12	13	3.7	95.4
	14	1	.3	95.7
	15	3	.9	96.5
	16	1	.3	96.8
	20	1	.3	97.1
	23	2	.6	97.7
	25	2	.6	98.3
	35	1	.3	98.6
	36	2	.6	99.1
	40	2	.6	99.7
	43	1	.3	100.0
Total	347	100.0	100.0	

a. Mean = 6.60, Standard Deviation = 5.711

Table 28
Any Creative Work / Writing / Research

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Yes	219	63.1	63.1
	No	128	36.9	100.0
Total		347	100.0	

a. Mean = 1.37, Standard Deviation = .483

Table 29
Type of Primary Work / Writing / Research

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Basic research	81	23.3	37.0	37.0
	Applied or policy-oriented research or analysis	90	25.9	41.1	78.1
	Literary, performance or exhibitions	8	2.3	3.7	81.7
	Program/curriculum design and development	39	11.2	17.8	99.5
	Other	1	.3	.5	100.0
	Total	219	63.1	100.0	
Missing	System	128	36.9		
Total		347	100.0		

Table 30
Any Funded Research

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Yes	78	22.5	28.0	28.0
	No	201	57.9	72.0	100.0
	Total	279	80.4	100.0	
Missing	System	68	19.6		
Total		347	100.0		

a. Mean = 1.72, Standard Deviation = .450

Table 31
Principal Investigator / Co-Principal Investigator on Grants or Contracts

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Yes	60	17.3	33.1	33.1
	No	121	34.9	66.9	100.0
	Total	181	52.2	100.0	
Missing	System	166	47.8		
Total		347	100.0		

a. Mean = 1.67, Standard Deviation = .472

Table 32
Receive Institutional Funds for Tuition Remission

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Yes	38	11.0	11.0	11.0
	No, although funds were available	135	38.9	38.9	49.9
	No, no funds were available, or not eligible	133	38.3	38.3	88.2
	No, don't know if funds were available	41	11.8	11.8	100.0
	Total	347	100.0	100.0	

a. Mean = 2.51, Standard Deviation = .841

Table 33
Receive Institutional Funds for Professional Association Members, Registration Fees

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Yes	92	26.5	26.5	26.5
	No, although funds were available	38	11.0	11.0	37.5
	No, no funds were available, or not eligible	186	53.6	53.6	91.1
	No, don't know if funds were available	31	8.9	8.9	100.0
	Total	347	100.0	100.0	

a. Mean = 2.45, Standard Deviation = .979

Table 34
Receive Institutional Funds for Professional Travel

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Yes	191	55.0	55.0	55.0
	No, although funds were available	81	23.3	23.3	78.4
	No, no funds were available, or not eligible	70	20.2	20.2	98.6
	No, don't know if funds were available	5	1.4	1.4	100.0
	Total	347	100.0	100.0	

a. Mean = 1.68, Standard Deviation = .842

Table 35

Receive Institutional Funds for Training to Improve Research or Teaching Skills

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Yes	69	19.9	19.9	19.9
	No, although funds were available	99	28.5	28.5	48.4
	No, no funds were available, or not eligible	154	44.4	44.4	92.8
	No, don't know if funds were available	25	7.2	7.2	100.0
	Total	347	100.0	100.0	

a. Mean = 2.39, Standard Deviation = .884

Table 36

Receive Institutional Funds for Sabbatical Leave

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	6.3	6.3	6.3
	No, although funds were available	139	40.1	40.1	46.4
	No, no funds were available, or not eligible	165	47.6	47.6	93.9
	No, don't know if funds were available	21	6.1	6.1	100.0
	Total	347	100.0	100.0	

a. Mean = 2.53, Standard Deviation = .706

Table 37

Satisfaction with Authority to Decide Course Content

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	7	2.0	2.0	2.0
	Very dissatisfied	6	1.7	1.7	3.7
	Somewhat dissatisfied	11	3.2	3.2	6.9
	Somewhat satisfied	59	17.0	17.0	23.9
	Very satisfied	264	76.1	76.1	100.0
	Total	347	100.0	100.0	

a. Mean = 3.53, Standard Deviation = 1.369

Table 38

Satisfaction with Authority to Decide Courses Taught

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	2.6	2.6	2.6
	Very dissatisfied	16	4.6	4.6	7.2
	Somewhat dissatisfied	36	10.4	10.4	17.6
	Somewhat satisfied	153	44.1	44.1	61.7
	Very satisfied	133	38.3	38.3	100.0
	Total	347	100.0	100.0	

a. Mean = 2.98, Standard Deviation = 1.529

Table 39

Satisfaction with Authority to Make Other Job Decisions

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	12	3.5	3.5	3.5
	Very dissatisfied	28	8.1	8.1	11.5
	Somewhat dissatisfied	63	18.2	18.2	29.7
	Somewhat satisfied	149	42.9	42.9	72.6
	Very satisfied	95	27.4	27.4	100.0
	Total	347	100.0	100.0	

a. Mean = 2.65, Standard Deviation = 1.697

Table 40

Satisfaction with Time Available to Advise Students

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	2.6	2.6	2.6
	Very dissatisfied	13	3.7	3.7	6.3
	Somewhat dissatisfied	49	14.1	14.1	20.5
	Somewhat satisfied	165	47.6	47.6	68.0
	Very satisfied	111	32.0	32.0	100.0
	Total	347	100.0	100.0	

a. Mean = 2.90, Standard Deviation = 1.506

Table 41
Satisfaction with Quality of Undergraduate Students

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	12	3.5	3.5	3.5
	Very dissatisfied	38	11.0	11.0	14.4
	Somewhat dissatisfied	100	28.8	28.8	43.2
	Somewhat satisfied	144	41.5	41.5	84.7
	Very satisfied	53	15.3	15.3	100.0
	Total	347	100.0	100.0	

a. Mean = 2.37, Standard Deviation = 1.644

Table 42
Satisfaction with Quality of Graduate Students

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	115	33.1	33.1	33.1
	Very dissatisfied	18	5.2	5.2	38.3
	Somewhat dissatisfied	51	14.7	14.7	53.0
	Somewhat satisfied	112	32.3	32.3	85.3
	Very satisfied	51	14.7	14.7	100.0
	Total	347	100.0	100.0	

a. Mean = 24, Standard Deviation = 3.763

Table 43
Satisfaction with Workload

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	41	11.8	11.8	11.8
	Somewhat dissatisfied	92	26.5	26.5	38.3
	Somewhat satisfied	138	39.8	39.8	78.1
	Very satisfied	76	21.9	21.9	100.0
	Total	347	100.0	100.0	

a. Mean = 2.72, Standard Deviation = .938

Table 44
Satisfaction with Advancement Opportunities

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	49	14.1	14.1	14.1
	Somewhat dissatisfied	77	22.2	22.2	36.3
	Somewhat satisfied	140	40.3	40.3	76.7
	Very satisfied	81	23.3	23.3	100.0
	Total	347	100.0	100.0	

a. Mean = 2.73, Standard Deviation = .974

Table 45
Satisfaction with Time to Keep Current in Field

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	74	21.3	21.3	21.3
	Somewhat dissatisfied	140	40.3	40.3	61.7
	Somewhat satisfied	98	28.2	28.2	89.9
	Very satisfied	35	10.1	10.1	100.0
	Total	347	100.0	100.0	

a. Mean = 2.27, Standard Deviation = .910

Table 46
Satisfaction with Freedom to Do Consulting

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	20	5.8	5.8	5.8
	Somewhat dissatisfied	60	17.3	17.3	23.1
	Somewhat satisfied	144	41.5	41.5	64.6
	Very satisfied	123	35.4	35.4	100.0
	Total	347	100.0	100.0	

a. Mean = 3.07, Standard Deviation = .869

Table 47
Satisfaction with Job Overall

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	18	5.2	5.2	5.2
	Somewhat dissatisfied	61	17.6	17.6	22.8
	Somewhat satisfied	194	55.9	55.9	78.7
	Very satisfied	74	21.3	21.3	100.0
	Total	347	100.0	100.0	

a. Mean = 2.93, Standard Deviation = .771

Table 48
Decision to Leave: How Important Advancement Opportunities?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not important	36	10.4	10.4	10.4
	Somewhat important	123	35.4	35.4	45.8
	Very important	188	54.2	54.2	100.0
	Total	347	100.0	100.0	

a. Mean = 2.44, Standard Deviation = .675

Table 49
Decision to Leave: How Important No Pressure to Publish?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not important	103	29.7	29.7	29.7
	Somewhat important	145	41.8	41.8	71.5
	Very important	99	28.5	28.5	100.0
	Total	347	100.0	100.0	

a. Mean = 1.99, Standard Deviation = .764

Table 50
Decision to Leave: How Important Increased Opportunities to Teach?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not important	93	26.8	26.8	26.8
	Somewhat important	145	41.8	41.8	68.6
	Very important	109	31.4	31.4	100.0
	Total	347	100.0	100.0	

a. Mean = 2.05, Standard Deviation = .763

Table 51

Decision to Leave: How Important Increased Opportunities to Do Research?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not important	103	29.7	29.7	29.7
	Somewhat important	126	36.3	36.3	66.0
	Very important	118	34.0	34.0	100.0
	Total	347	100.0	100.0	

a. Mean = 2.04, Standard Deviation = .798

Table 52

Academic Rank, Title, or Job

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Professor	76	21.9	21.9	21.9
	Associate professor	87	25.1	25.1	47.0
	Assistant professor	117	33.7	33.7	80.7
	Instructor	41	11.8	11.8	92.5
	Lecturer	20	5.8	5.8	98.3
	Other	6	1.7	1.7	100.0
	Total	347	100.0	100.0	

a. Mean = 2.60, Standard Deviation = 1.214

Table 53

Tenure Status

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Tenured	166	47.8	47.8	47.8
	On tenure track, but not tenured	103	29.7	29.7	77.5
	Not on tenure track, although institution has a tenure system	60	17.3	17.3	94.8
	No tenure system at this institution	18	5.2	5.2	100.0
	Total	347	100.0	100.0	

a. Mean = 1.80, Standard Deviation = .906

Table 54
Duration of Contract

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unspecified duration, or tenured	88	25.4	34.8	34.8
	One academic term	29	8.4	11.5	46.2
	One academic year or one calendar year	100	28.8	39.5	85.8
	Two or more academic/calendar years	33	9.5	13.0	98.8
	Other	3	.9	1.2	100.0
	Total	253	72.9	100.0	
Missing	System	94	27.1		
Total		347	100.0		

Table 55
Number of Years in Current Job

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	1	39	11.2	11.2	11.2
	2	29	8.4	8.4	19.6
	3	37	10.7	10.7	30.3
	4	25	7.2	7.2	37.5
	5	19	5.5	5.5	42.9
	6	15	4.3	4.3	47.3
	7	16	4.6	4.6	51.9
	8	13	3.7	3.7	55.6
	9	8	2.3	2.3	57.9
	10	19	5.5	5.5	63.4
	11	12	3.5	3.5	66.9
	12	10	2.9	2.9	69.7
	13	9	2.6	2.6	72.3
	14	10	2.9	2.9	75.2
	15	11	3.2	3.2	78.4
	16	8	2.3	2.3	80.7
	17	6	1.7	1.7	82.4
	18	6	1.7	1.7	84.1
	19	7	2.0	2.0	86.2
	20	1	.3	.3	86.5
	21	4	1.2	1.2	87.6

(table continues)

Table 55 (continued)

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
22	5	1.4	1.4	89.0
23	8	2.3	2.3	91.4
24	6	1.7	1.7	93.1
25	3	.9	.9	93.9
26	4	1.2	1.2	95.1
27	1	.3	.3	95.4
28	1	.3	.3	95.7
29	3	.9	.9	96.5
30	3	.9	.9	97.4
31	1	.3	.3	97.7
32	1	.3	.3	98.0
33	3	.9	.9	98.8
35	2	.6	.6	99.4
36	2	.6	.6	100.0
Total	347	100.0	100.0	

a. Mean = 9.72, Standard Deviation = 8.374

Table 56

Positions in Higher Education During Career

	Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	1	89	25.6	61.4
	2	11	3.2	7.6
	3	24	6.9	16.6
	4	8	2.3	5.5
	5	6	1.7	4.1
	6	3	.9	2.1
	8	3	.9	2.1
	11	1	.3	.7
Total	145	41.8	100.0	
Missing System	202	58.2		
Total	347	100.0		

a. Mean = 2.06, Standard Deviation = 1.739

Table 57
Years Teaching in Higher Education Institutions

		Frequency ^a	Percent	Valid Percent	Cumulative Percent	
Valid	1	3	.9	2.1	2.1	
	2	6	1.7	4.1	6.2	
	3	3	.9	2.1	8.3	
	4	9	2.6	6.2	14.5	
	5	4	1.2	2.8	17.2	
	6	9	2.6	6.2	23.4	
	7	6	1.7	4.1	27.6	
	8	6	1.7	4.1	31.7	
	9	3	.9	2.1	33.8	
	10	7	2.0	4.8	38.6	
	11	6	1.7	4.1	42.8	
	12	7	2.0	4.8	47.6	
	13	2	.6	1.4	49.0	
	14	6	1.7	4.1	53.1	
	15	5	1.4	3.4	56.6	
	16	6	1.7	4.1	60.7	
	17	6	1.7	4.1	64.8	
	18	8	2.3	5.5	70.3	
	19	2	.6	1.4	71.7	
	20	4	1.2	2.8	74.5	
	21	1	.3	.7	75.2	
	22	5	1.4	3.4	78.6	
	23	1	.3	.7	79.3	
	24	2	.6	1.4	80.7	
	25	3	.9	2.1	82.8	
	26	3	.9	2.1	84.8	
	27	1	.3	.7	85.5	
	28	2	.6	1.4	86.9	
	29	4	1.2	2.8	89.7	
	30	4	1.2	2.8	92.4	
	31	2	.6	1.4	93.8	
	32	4	1.2	2.8	96.6	
	33	4	1.2	2.8	99.3	
	37	1	.3	.7	100.0	
		Total	145	41.8	100.0	
	Missing	System	202	58.2		
	Total		347	100.0		

a. Mean = 14.82, Standard Deviation = 9.279

Table 58
Employed Only at This Institution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inst only employ	240	69.2	69.2	69.2
	Other employment	107	30.8	30.8	100.0
	Total	347	100.0	100.0	

Table 59
Other Employment in Year of Survey: Number of Positions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	97	28.0	54.2	54.2
	1	55	15.9	30.7	84.9
	2	16	4.6	8.9	93.9
	3	8	2.3	4.5	98.3
	4	1	.3	.6	98.9
	6	1	.3	.6	99.4
	7	1	.3	.6	100.0
	Total	179	51.6	100.0	
Missing	System	168	48.4		
Total		347	100.0		

Table 60
Rating of Research Equipment, Instruments

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Poor	51	14.7	14.7	14.7
	Fair	78	22.5	22.5	37.2
	Good	114	32.9	32.9	70.0
	Excellent	38	11.0	11.0	81.0
	Not available/Not applicable/Don't know	66	19.0	19.0	100.0
	Total	347	100.0	100.0	

a. Mean = 2.97, Standard Deviation = 1.299

Table 61
Rating of Laboratory Space, Supplies

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Poor	46	13.3	13.3	13.3
	Fair	87	25.1	25.1	38.3
	Good	107	30.8	30.8	69.2
	Excellent	36	10.4	10.4	79.5
	Not available/Not applicable/Don't know	71	20.5	20.5	100.0
	Total	347	100.0	100.0	

a. Mean = 3.00, Standard Deviation = 1.307

Table 62
Rating of Availability of Research Assistants

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Poor	96	27.7	27.7	27.7
	Fair	66	19.0	19.0	46.7
	Good	51	14.7	14.7	61.4
	Excellent	10	2.9	2.9	64.3
	Not available/Not applicable/Don't know	124	35.7	35.7	100.0
	Total	347	100.0	100.0	

a. Mean = 3.00, Standard Deviation = 1.662

Table 63
Rating of Computers and Local Networks

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Poor	17	4.9	4.9	4.9
	Fair	58	16.7	16.7	21.6
	Good	148	42.7	42.7	64.3
	Excellent	106	30.5	30.5	94.8
	Not available/Not applicable/Don't know	18	5.2	5.2	100.0
	Total	347	100.0	100.0	

a. Mean = 3.14, Standard Deviation = .926

Table 64
Rating of Centralized Computer Facilities

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Poor	33	9.5	9.5	9.5
	Fair	69	19.9	19.9	29.4
	Good	132	38.0	38.0	67.4
	Excellent	55	15.9	15.9	83.3
	Not available/Not applicable/Don't know	58	16.7	16.7	100.0
	Total	347	100.0	100.0	

a. Mean = 3.10. Standard Deviation = 1.183

Table 65
Rating of Internet Connections

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Poor	30	8.6	8.6	8.6
	Fair	46	13.3	13.3	21.9
	Good	146	42.1	42.1	64.0
	Excellent	88	25.4	25.4	89.3
	Not available/Not applicable/Don't know	37	10.7	10.7	100.0
	Total	347	100.0	100.0	

a. Mean = 3.16. Standard Deviation = 1.066

Table 66
Rating of Audio-visual Equipment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	28	8.1	8.1	8.1
	Fair	87	25.1	25.1	33.1
	Good	170	49.0	49.0	82.1
	Excellent	35	10.1	10.1	92.2
	Not available/Not applicable/Don't know	27	7.8	7.8	100.0
	Total	347	100.0	100.0	

Table 67
Rating of Classroom Space

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Poor	23	6.6	6.6	6.6
	Fair	87	25.1	25.1	31.7
	Good	179	51.6	51.6	83.3
	Excellent	46	13.3	13.3	96.5
	Not available/Not applicable/Don't know	12	3.5	3.5	100.0
	Total	347	100.0	100.0	

a. Mean = 2.83, Standard Deviation = .869

Table 68
Rating of Office Space

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Poor	32	9.2	9.2	9.2
	Fair	67	19.3	19.3	28.5
	Good	167	48.1	48.1	76.7
	Excellent	68	19.6	19.6	96.3
	Not available/Not applicable/Don't know	13	3.7	3.7	100.0
	Total	347	100.0	100.0	

a. Mean = 2.89, Standard Deviation = .948

Table 69
Rating of Secretarial Support

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Poor	60	17.3	17.3	17.3
	Fair	88	25.4	25.4	42.7
	Good	128	36.9	36.9	79.5
	Excellent	53	15.3	15.3	94.8
	Not available/Not applicable/Don't know	18	5.2	5.2	100.0
	Total	347	100.0	100.0	

a. Mean = 2.66, Standard Deviation = 1.091

Table 70
Rating of Library Holdings

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Poor	54	15.6	15.6	15.6
	Fair	105	30.3	30.3	45.8
	Good	142	40.9	40.9	86.7
	Excellent	25	7.2	7.2	93.9
	Not available/Not applicable/Don't know	21	6.1	6.1	100.0
	Total	347	100.0	100.0	

a. Mean = 2.58, Standard Deviation = 1.032

Table 71
Satisfaction with Job Security

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	36	10.4	10.4	10.4
	Somewhat dissatisfied	33	9.5	9.5	19.9
	Somewhat satisfied	125	36.0	36.0	55.9
	Very satisfied	153	44.1	44.1	100.0
	Total	347	100.0	100.0	

a. Mean = 3.14, Standard Deviation = .967

Table 72
Satisfaction with Salary

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	85	24.5	24.5	24.5
	Somewhat dissatisfied	101	29.1	29.1	53.6
	Somewhat satisfied	133	38.3	38.3	91.9
	Very satisfied	28	8.1	8.1	100.0
	Total	347	100.0	100.0	

a. Mean = 2.30, Standard Deviation = .929

Table 73
Satisfaction with Benefits

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	37	10.7	10.7	10.7
	Somewhat dissatisfied	63	18.2	18.2	28.8
	Somewhat satisfied	176	50.7	50.7	79.5
	Very satisfied	71	20.5	20.5	100.0
	Total	347	100.0	100.0	

a. Mean = 2.81, Standard Deviation = .882

Table 74
Satisfaction with Employment Opportunities for Spouse

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	32	9.2	9.2	9.2
	Very dissatisfied	45	13.0	13.0	22.2
	Somewhat dissatisfied	49	14.1	14.1	36.3
	Somewhat satisfied	132	38.0	38.0	74.4
	Very satisfied	89	25.6	25.6	100.0
	Total	347	100.0	100.0	

a. Mean = 2.12, Standard Deviation = 2.461

Table 75
Decision to Leave: How Important Salary Level?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not important	14	4.0	4.0	4.0
	Somewhat important	139	40.1	40.1	44.1
	Very important	194	55.9	55.9	100.0
	Total	347	100.0	100.0	

a. Mean = 2.52, Standard Deviation = .576

Table 76
Decision to Leave: How Important Tenure?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not important	69	19.9	19.9	19.9
	Somewhat important	90	25.9	25.9	45.8
	Very important	188	54.2	54.2	100.0
	Total	347	100.0	100.0	

a. Mean = 2.34, Standard Deviation = .790

Table 77
Decision to Leave: How Important Job Security?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not important	22	6.3	6.3	6.3
	Somewhat important	110	31.7	31.7	38.0
	Very important	215	62.0	62.0	100.0
	Total	347	100.0	100.0	

a. Mean = 2.56, Standard Deviation = .612

Table 78
Decision to Leave: How Important Benefits?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not important	15	4.3	4.3	4.3
	Somewhat important	119	34.3	34.3	38.6
	Very important	213	61.4	61.4	100.0
	Total	347	100.0	100.0	

a. Mean = 2.57, Standard Deviation = .577

Table 79
Decision to Leave: How Important Research Facilities?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not important	47	13.5	13.5	13.5
	Somewhat important	134	38.6	38.6	52.2
	Very important	166	47.8	47.8	100.0
	Total	347	100.0	100.0	

a. Mean = 2.34, Standard Deviation = .705

Table 80

Decision to Leave: How Important Instructional Facilities?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not important	15	4.3	4.3	4.3
	Somewhat important	115	33.1	33.1	37.5
	Very important	217	62.5	62.5	100.0
	Total	347	100.0	100.0	

a. Mean = 2.58, Standard Deviation = .575

Table 81

Decision to Leave: How Important Employment Opportunities for Spouse?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	26	7.5	7.5	7.5
	Not important	68	19.6	19.6	27.1
	Somewhat important	116	33.4	33.4	60.5
	Very important	137	39.5	39.5	100.0
	Total	347	100.0	100.0	

a. Mean = 1.67, Standard Deviation = 2.042

Table 82

Decision to Leave: How Important Geographic Location?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not important	21	6.1	6.1	6.1
	Somewhat important	135	38.9	38.9	45.0
	Very important	191	55.0	55.0	100.0
	Total	347	100.0	100.0	

a. Mean = 2.49, Standard Deviation = .610

Table 83

Decision to Leave: How Important Good Schools for Children?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	46	13.3	13.3	13.3
	Not important	107	30.8	30.8	44.1
	Somewhat important	50	14.4	14.4	58.5
	Very important	144	41.5	41.5	100.0
	Total	347	100.0	100.0	

a. Mean = 1.18, Standard Deviation = 2.562

Table 84
Total Income from Institution

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$20,000	12	3.5	3.5	3.5
	\$20,000 to 29,999	27	7.8	7.8	11.2
	\$30,000 to 39,999	66	19.0	19.0	30.3
	\$40,000 to 49,999	75	21.6	21.6	51.9
	\$50,000 to 59,999	68	19.6	19.6	71.5
	\$60,000 to \$69,999	40	11.5	11.5	83.0
	\$70,000 to 79,999	31	8.9	8.9	91.9
	\$80,000 to 89,999	12	3.5	3.5	95.4
	\$90,000 to 99,999	7	2.0	2.0	97.4
	More than \$100,000	9	2.6	2.6	100.0
	Total	347	100.0	100.0	

a. Mean = 4.64

Table 85
Total Income, All Sources

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$20,000	7	2.0	2.0	2.0
	\$20,000 to 29,999	20	5.8	5.8	7.8
	\$30,000 to 39,999	55	15.9	15.9	23.6
	\$40,000 to 49,999	69	19.9	19.9	43.5
	\$50,000 to 59,999	63	18.2	18.2	61.7
	\$60,000 to \$69,999	46	13.3	13.3	74.9
	\$70,000 to 79,999	37	10.7	10.7	85.6
	\$80,000 to 89,999	17	4.9	4.9	90.5
	\$90,000 to 99,999	13	3.7	3.7	94.2
	More than \$100,000	20	5.8	5.8	100.0
	Total	347	100.0	100.0	

a. Mean = 5.16

Table 86
Total Household Income

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$20,000	7	2.0	2.0	2.0
	\$20,000 to 29,999	9	2.6	2.6	4.6
	\$30,000 to 39,999	23	6.6	6.6	11.2
	\$40,000 to 49,999	32	9.2	9.2	20.5
	\$50,000 to 59,999	39	11.2	11.2	31.7
	\$60,000 to \$69,999	39	11.2	11.2	42.9
	\$70,000 to 79,999	54	15.6	15.6	58.5
	\$80,000 to 89,999	20	5.8	5.8	64.3
	\$90,000 to 99,999	20	5.8	5.8	70.0
	More than \$100,000	104	30.0	30.0	100.0
	Total	347	100.0	100.0	

a. Mean = 6.94

Table 87
Highest Degree Type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First-professional degree	10	2.9	2.9	2.9
	Doctoral degree	216	62.2	62.2	65.1
	Master of Fine Arts, Master of Social Work	1	.3	.3	65.4
	Other Master's degree	117	33.7	33.7	99.1
	Bachelor's degree	3	.9	.9	100.0
	Total	347	100.0	100.0	

Table 88
Highest Degree Field

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Business	29	8.4	8.4	8.4
	Education	29	8.4	8.4	16.7
	Engineering	23	6.6	6.6	23.3
	English & Literature	3	.9	.9	24.2
	Mathematics/Statistics	21	6.1	6.1	30.3
	Physical Sciences	10	2.9	2.9	33.1
	Parks & Recreation	34	9.8	9.8	42.9
	Philosophy	5	1.4	1.4	44.4
	Computer Science	16	4.6	4.6	49.0
	Computer & Information Sciences	121	34.9	34.9	83.9
	Computer Programming	9	2.6	2.6	86.5
	Systems Analysis	4	1.2	1.2	87.6
	Other Computer Science	21	6.1	6.1	93.7
	Other	22	6.3	6.3	100.0
	Total	347	100.0	100.0	

Table 89
Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	264	76.1	76.1	76.1
	Female	83	23.9	23.9	100.0
	Total	347	100.0	100.0	

Table 90
Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 30	4	1.2	1.2	1.2
	30-44	140	40.3	40.3	41.5
	45-54	139	40.1	40.1	81.6
	55-59	36	10.4	10.4	91.9
	60-64	18	5.2	5.2	97.1
	65+	10	2.9	2.9	100.0
	Total	347	100.0	100.0	

Table 91
Race / Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	American Indian or Alaska Native	1	.3	.3	.3
	Asian and/or Pacific Islander	58	16.7	16.7	17.0
	Black/African American non-Hispanic	15	4.3	4.3	21.3
	Hispanic	12	3.5	3.5	24.8
	White, non-Hispanic	261	75.2	75.2	100.0
	Total	347	100.0	100.0	

Table 92
Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single, never married	45	13.0	13.0	13.0
	Married	273	78.7	78.7	91.6
	Living with someone in a marriage-like relationship	2	.6	.6	92.2
	Separated, divorced, or widowed	27	7.8	7.8	100.0
	Total	347	100.0	100.0	

Table 93
Spouse Employed in Higher Education

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	6.9	16.6	16.6
	Yes, at this institution	14	4.0	9.7	26.2
	Yes, at another higher education institution	10	2.9	6.9	33.1
	No	97	28.0	66.9	100.0
	Total	145	41.8	100.0	
Missing	System	202	58.2		
Total		347	100.0		

a. Mean = 1.80, Standard Deviation = .400

Table 94
Country of Birth

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	USA	252	72.6	72.6	72.6
	Other	95	27.4	27.4	100.0
	Total	347	100.0	100.0	

Table 95
Citizenship Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	United States citizen, native	256	73.8	73.8	73.8
	United States citizen, naturalized	31	8.9	8.9	82.7
	Permanent resident of the United States (immigrant visa)	49	14.1	14.1	96.8
	Temporary resident of United States (non-immigrant visa)	11	3.2	3.2	100.0
	Total	347	100.0	100.0	

Table 96
How Likely a Part-time Job at Another Postsecondary Institution?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not at all likely	299	86.2	86.2	86.2
	Somewhat likely	34	9.8	9.8	96.0
	Very likely	14	4.0	4.0	100.0
	Total	347	100.0	100.0	

a. Mean = 1.18, Standard Deviation = .478

Table 97

How Likely a Full-time Job at Another Postsecondary Institution?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not at all likely	191	55.0	55.0	55.0
	Somewhat likely	111	32.0	32.0	87.0
	Very likely	45	13.0	13.0	100.0
	Total	347	100.0	100.0	

a. Mean = 1.58, Standard Deviation = .710

Table 98

How Likely a Part-time Job, Not at a Postsecondary Institution?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not at all likely	292	84.1	84.1	84.1
	Somewhat likely	41	11.8	11.8	96.0
	Very likely	14	4.0	4.0	100.0
	Total	347	100.0	100.0	

a. Mean = 1.20, Standard Deviation = .491

Table 99

How Likely a Full-time Job, Not at a Postsecondary Institution?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not at all likely	230	66.3	66.3	66.3
	Somewhat likely	83	23.9	23.9	90.2
	Very likely	34	9.8	9.8	100.0
	Total	347	100.0	100.0	

a. Mean = 1.44, Standard Deviation = .666

Table 100

How Likely to Retire in Next Three Years?

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Not at all likely	305	87.9	87.9	87.9
	Somewhat likely	29	8.4	8.4	96.3
	Very likely	13	3.7	3.7	100.0
	Total	347	100.0	100.0	

a. Mean = 1.16, Standard Deviation = .457

Table 101
Age Most Likely to Stop Working at Postsecondary Institution

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Don't know	91	26.2	26.2	26.2
		32	.3	.3	26.5
		35	.3	.3	26.8
		40	.3	.3	27.1
		50	.9	.9	28.0
		53	.3	.3	28.2
		55	4.9	4.9	33.1
		56	.6	.6	33.7
		58	1.2	1.2	34.9
		59	.9	.9	35.7
		60	8.4	8.4	44.1
		61	.6	.6	44.7
		62	4.6	4.6	49.3
		63	1.7	1.7	51.0
		64	.9	.9	51.9
		65	89	25.6	77.5
		66	6	1.7	79.3
		67	6	1.7	81.0
		68	1	.3	81.3
		69	2	.6	81.8
		70	47	13.5	95.4
		71	1	.3	95.7
		72	4	1.2	96.8
		74	1	.3	97.1
		75	3	.9	98.0
		79	1	.3	98.3
		80	1	.3	98.6
		83	2	.6	99.1
		84	1	.3	99.4
		90	1	.3	99.7
		99	1	.3	100.0
	Total	347	100.0	100.0	

a. Mean = 64.55, Standard Deviation = 6.729

Table 102
Retire and Work Part-time at Current Institution?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't know	92	26.5	26.5	26.5
	Yes	155	44.7	44.7	71.2
	No	100	28.8	28.8	100.0
	Total	347	100.0	100.0	

Table 103
Retired from Another Position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	1.7	4.1	4.1
	No	139	40.1	95.9	100.0
	Total	145	41.8	100.0	
Missing	System	202	58.2		
Total		347	100.0		

Table 104
Would You Take Early Retirement?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't know	128	36.9	36.9	36.9
	Yes	97	28.0	28.0	64.8
	No	122	35.2	35.2	100.0
	Total	347	100.0	100.0	

Table 105
Age Likely to Retire from All Paid Employment

		Frequency ^a	Percent	Valid Percent	Cumulative Percent
Valid	Don't know	95	27.4	27.4	27.4
	50	1	.3	.3	27.7
	53	1	.3	.3	28.0
	55	10	2.9	2.9	30.8
	56	1	.3	.3	31.1
	57	1	.3	.3	31.4
	59	3	.9	.9	32.3
	60	32	9.2	9.2	41.5
	61	2	.6	.6	42.1
	62	11	3.2	3.2	45.2
	63	5	1.4	1.4	46.7
	65	80	23.1	23.1	69.7
	66	6	1.7	1.7	71.5
	67	8	2.3	2.3	73.8
	68	4	1.2	1.2	74.9
	69	2	.6	.6	75.5
	70	58	16.7	16.7	92.2
	71	1	.3	.3	92.5
	72	3	.9	.9	93.4
	73	2	.6	.6	93.9
	75	10	2.9	2.9	96.8
	76	2	.6	.6	97.4
	80	2	.6	.6	98.0
	82	1	.3	.3	98.3
	84	1	.3	.3	98.6
	85	2	.6	.6	99.1
	89	1	.3	.3	99.4
	90	1	.3	.3	99.7
	95	1	.3	.3	100.0
	Total	347	100.0	100.0	

a. Mean = 66.23. Standard Deviation = 6.088

Table 106
Decision to Leave: Most Important Factor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Salary level	54	15.6	37.2	37.2
	Tenure-track or tenured position	7	2.0	4.8	42.1
	Job security	10	2.9	6.9	49.0
	Opportunities for advancement	5	1.4	3.4	52.4
	Benefits	1	.3	.7	53.1
	No pressure to publish	5	1.4	3.4	56.6
	Good research facilities and equipment	8	2.3	5.5	62.1
	Good instructional facilities and equipment	7	2.0	4.8	66.9
	Good job or job opportunities for your spouse or partner	9	2.6	6.2	73.1
	Good geographic location	9	2.6	6.2	79.3
	Good environment or schools for your children	1	.3	.7	80.0
	Greater opportunity to teach	4	1.2	2.8	82.8
	Greater opportunity to do research	22	6.3	15.2	97.9
	None	3	.9	2.1	100.0
	Total	145	41.8	100.0	
Missing	System	202	58.2		
Total		347	100.0		

Table 107A

Hours Per Week Paid Activities at Institution – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Hours/week paid activities at institution	Less than 20 hrs			1	3%	6	5%	1	4%	8	4%
	20-29 hrs			1	3%	6	5%	3	12%	10	5%
	30-39 hrs	1	6%	8	21%	18	15%	5	19%	32	16%
	40-49 hrs	8	44%	14	36%	47	39%	7	27%	76	38%
	50-59 hrs	5	28%	7	18%	30	25%	7	27%	49	24%
	60-69 hrs	2	11%	8	21%	12	10%	2	8%	24	12%
	70-79 hrs							1	4%	1	0%
	80 or more hrs	2	11%							2	1%

Table 107B

Hours Per Week Paid Activities at Institution – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Hours/week paid activities at institution	Less than 20 hrs					3	5%			3	2%
	20-29 hrs	2	5%			4	6%			6	4%
	30-39 hrs			2	9%	5	8%	1	6%	8	6%
	40-49 hrs	9	21%	9	41%	15	24%	6	33%	39	27%
	50-59 hrs	26	60%	7	32%	18	29%	7	39%	58	40%
	60-69 hrs	6	14%	4	18%	15	24%	3	17%	28	19%
	70-79 hrs					2	3%	1	6%	3	2%
	80 or more hrs										

Table 108A

Hours Per Week Unpaid Activities at Institution – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Hrs/wk unpaid activities at institution	0 hrs	12	67%	21	54%	46	39%	6	23%	85	42%
	1-9 hrs	4	22%	9	23%	41	34%	12	46%	66	33%
	10-19 hrs	2	11%	6	15%	24	20%	6	23%	38	19%
	20-29 hrs			3	8%	8	7%	1	4%	12	6%
	30-39 hrs							1	4%	1	0%
	40-49 hrs										

Table 108B

Hours Per Week Unpaid Activities at Institution – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Hrs/wk unpaid activities at institution	0 hrs	30	70%	17	77%	43	69%	14	78%	104	72%
	1-9 hrs	6	14%	4	18%	15	24%	3	17%	28	19%
	10-19 hrs	3	7%			3	5%	1	6%	7	5%
	20-29 hrs	3	7%			1	2%			4	3%
	30-39 hrs	1	2%							1	1%
	40-49 hrs			1	5%					1	1%

Table 109A

Hours Per Week Paid Activities Not at Institution – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Hrs/wk paid activity not at institution	0 hrs	15	83%	30	77%	85	71%	17	65%	147	73%
	1-9 hrs	2	11%	6	15%	20	17%	6	23%	34	17%
	10-19 hrs	1	6%	2	5%	9	8%	3	12%	15	7%
	20-29 hrs			1	3%	3	3%			4	2%
	30-39 hrs					2	2%			2	1%
	40-49 hrs										

Table 109B

Hours Per Week Paid Activities Not at Institution – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Hrs/wk paid activity not at institution	0 hrs	32	74%	15	68%	44	71%	13	72%	104	72%
	1-9 hrs	9	21%	3	14%	8	13%	3	17%	23	16%
	10-19 hrs	1	2%	2	9%	3	5%	2	11%	8	6%
	20-29 hrs			1	5%	3	5%			4	3%
	30-39 hrs			1	5%	2	3%			3	2%
	40-49 hrs	1	2%			2	3%			3	2%

Table 110A

Hours Per Week Unpaid Activities Not at Institution – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Hrs/wk unpaid activity not at institution	0 hrs	13	72%	25	64%	81	68%	16	62%	135	67%
	1-9 hrs	4	22%	13	33%	34	29%	10	38%	61	30%
	10-19 hrs	1	6%	1	3%	3	3%			5	2%
	20-29 hrs					1	1%			1	0%

Table 110B

Hours Per Week Unpaid Activities Not at Institution – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Hrs/wk unpaid activity not at institution	0 hrs	24	56%	15	68%	44	71%	14	78%	97	67%
	1-9 hrs	17	40%	7	32%	18	29%	3	17%	45	31%
	10-19 hrs	1	2%					1	6%	2	1%
	20-29 hrs	1	2%							1	1%

Table 111A

Time Actually Spent Teaching – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent teaching	10-19 hrs	1	6%			1	1%			2	1%
	20-29 hrs	1	6%	1	3%	8	7%	1	4%	11	5%
	30-39 hrs	1	6%	6	15%	6	5%			13	6%
	40-49 hrs	1	6%	4	10%	8	7%	1	4%	14	7%
	50-59 hrs	3	17%	5	13%	16	13%	4	15%	28	14%
	60-69 hrs	4	22%	5	13%	20	17%			29	14%
	70-79 hrs	2	11%	8	21%	23	19%	5	19%	38	19%
	80 or more hrs	5	28%	10	26%	37	31%	15	58%	67	33%

Table 111B

Time Actually Spent Teaching – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent teaching	10-19 hrs					1	2%			1	1%
	20-29 hrs	1	2%							1	1%
	30-39 hrs	3	7%	1	5%	1	2%	1	6%	6	4%
	40-49 hrs	8	19%	2	9%	3	5%	2	11%	15	10%
	50-59 hrs	6	14%	5	23%	11	18%	1	6%	23	16%
	60-69 hrs	7	16%	3	14%	6	10%	3	17%	19	13%
	70-79 hrs	9	21%	4	18%	11	18%	2	11%	26	18%
	80 or more hrs	9	21%	7	32%	29	47%	9	50%	54	37%

Table 112A

Time Actually Spent at Research – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent at research	0 hrs	2	11%	9	23%	28	24%	13	50%	52	26%
	1-9 hrs			3	8%	29	24%	7	27%	39	19%
	10-19 hrs	6	33%	7	18%	30	25%	3	12%	46	23%
	20-29 hrs	5	28%	12	31%	17	14%	3	12%	37	18%
	30-39 hrs	2	11%	3	8%	9	8%			14	7%
	40-49 hrs	1	6%	5	13%	3	3%			9	4%
	50-59 hrs	1	6%			1	1%			2	1%
	60-69 hrs					2	2%			2	1%
	70-79 hrs	1	6%							1	0%

Table 112B

Time Actually Spent at Research – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent at research	0 hrs	7	16%	7	32%	23	37%	12	67%	49	34%
	1-9 hrs	4	9%	2	9%	20	32%	3	17%	29	20%
	10-19 hrs	12	28%	4	18%	8	13%	3	17%	27	19%
	20-29 hrs	4	9%	5	23%	6	10%			15	10%
	30-39 hrs	6	14%			3	5%			9	6%
	40-49 hrs	9	21%	2	9%	1	2%			12	8%
	50-59 hrs			2	9%	1	2%			3	2%
	60-69 hrs										
	70-79 hrs	1	2%							1	1%

Table 113A

Time Actually Spent on Professional Growth – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent on professional growth	0 hrs	13	72%	22	56%	45	38%	9	35%	89	44%
	1-9 hrs	1	6%	10	26%	35	29%	6	23%	52	26%
	10-19 hrs	3	17%	5	13%	25	21%	10	38%	43	21%
	20-29 hrs			1	3%	11	9%	1	4%	13	6%
	30-39 hrs					2	2%			2	1%
	40-49 hrs	1	6%	1	3%	1	1%			3	1%

Table 113B

Time Actually Spent on Professional Growth – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent on professional growth	0 hrs	26	60%	8	36%	25	40%	5	28%	64	44%
	1-9 hrs	12	28%	7	32%	21	34%	7	39%	47	32%
	10-19 hrs	4	9%	6	27%	12	19%	4	22%	26	18%
	20-29 hrs	1	2%	1	5%	3	5%	1	6%	6	4%
	30-39 hrs					1	2%	1	6%	2	1%
	40-49 hrs										

Table 114A

Time Actually Spent at Administration – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent at administration	0 hrs	8	44%	11	28%	53	45%	9	35%	81	40%
	1-9 hrs	6	33%	8	21%	23	19%	6	23%	43	21%
	10-19 hrs	3	17%	11	28%	22	18%	5	19%	41	20%
	20-29 hrs	1	6%	8	21%	11	9%	3	12%	23	11%
	30-39 hrs					3	3%	1	4%	4	2%
	40-49 hrs					2	2%	1	4%	3	1%
	50-59 hrs			1	3%	4	3%	1	4%	6	3%
	60-69 hrs					1	1%			1	0%
70-79 hrs											

Table 114B

Time Actually Spent at Administration – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent at administration	0 hrs	11	26%	3	14%	27	44%	6	33%	47	32%
	1-9 hrs	7	16%	8	36%	15	24%	4	22%	34	23%
	10-19 hrs	19	44%	9	41%	11	18%	4	22%	43	30%
	20-29 hrs	3	7%	1	5%	5	8%			9	6%
	30-39 hrs	2	5%	1	5%	1	2%	2	11%	6	4%
	40-49 hrs	1	2%			3	5%			4	3%
	50-59 hrs							1	6%	1	1%
	60-69 hrs										
70-79 hrs							1	6%	1	1%	

Table 115A

Time Actually Spent on Service Activity – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent on service activity	0 hrs	11	61%	22	56%	59	50%	15	58%	107	53%
	1-9 hrs	2	11%	11	28%	32	27%	9	35%	54	27%
	10-19 hrs	4	22%	4	10%	19	16%	2	8%	29	14%
	20-29 hrs	1	6%	2	5%	5	4%			8	4%
	30-39 hrs					3	3%			3	1%
	60-69 hrs					1	1%			1	0%

Table 115B

Time Actually Spent on Service Activity – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent on service activity	0 hrs	17	40%	12	55%	39	63%	14	78%	82	57%
	1-9 hrs	15	35%	6	27%	15	24%	3	17%	39	27%
	10-19 hrs	10	23%	3	14%	6	10%	1	6%	20	14%
	20-29 hrs	1	2%	1	5%	2	3%			4	3%
	30-39 hrs										
	60-69 hrs										

Table 116A

Time Actually Spent on Consulting – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent on consulting	0 hrs	15	83%	33	85%	85	71%	18	69%	151	75%
	1-9 hrs	2	11%	3	8%	15	13%	6	23%	26	13%
	10-19 hrs			2	5%	11	9%	1	4%	14	7%
	20-29 hrs	1	6%			5	4%	1	4%	7	3%
	30-39 hrs			1	3%	2	2%			3	1%
	40-49 hrs										
	50-59 hrs					1	1%			1	0%
	60-69 hrs										
	80 or more hrs										

Table 116B

Time Actually Spent on Consulting – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time actually spent on consulting	0 hrs	31	72%	15	68%	44	71%	11	61%	101	70%
	1-9 hrs	9	21%	6	27%	11	18%	7	39%	33	23%
	10-19 hrs	2	5%			1	2%			3	2%
	20-29 hrs	1	2%	1	5%	2	3%			4	3%
	30-39 hrs					1	2%			1	1%
	40-49 hrs					1	2%			1	1%
	50-59 hrs										
	60-69 hrs					1	2%			1	1%
	80 or more hrs					1	2%			1	1%

Table 117A

Time Preferred at Teaching – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred at teaching	0 hrs			1	3%					1	0%
	10-19 hrs	1	6%	2	5%					3	1%
	20-29 hrs	4	22%			8	7%	1	4%	13	6%
	30-39 hrs	2	11%	2	5%	13	11%	2	8%	19	9%
	40-49 hrs	2	11%	7	18%	15	13%	3	12%	27	13%
	50-59 hrs	3	17%	10	26%	32	27%	2	8%	47	23%
	60-69 hrs	4	22%	5	13%	19	16%	2	8%	30	15%
	70-79 hrs	1	6%	6	15%	12	10%	11	42%	30	15%
	80 or more hrs	1	6%	6	15%	20	17%	5	19%	32	16%

Table 117B

Time Preferred at Teaching – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred at teaching	0 hrs					1	2%			1	1%
	10-19 hrs					1	2%			1	1%
	20-29 hrs	2	5%	1	5%	2	3%			5	3%
	30-39 hrs	6	14%	2	9%	3	5%			11	8%
	40-49 hrs	9	21%	3	14%	5	8%	3	17%	20	14%
	50-59 hrs	11	26%	10	45%	10	16%	2	11%	33	23%
	60-69 hrs	3	7%	3	14%	13	21%	4	22%	23	16%
	70-79 hrs	4	9%	1	5%	13	21%	2	11%	20	14%
	80 or more hrs	8	19%	2	9%	14	23%	7	39%	31	21%

Table 118A

Time Preferred at Research – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred at research	0 hrs	1	6%	8	21%	16	13%	8	31%	33	16%
	1-9 hrs			2	5%	16	13%	3	12%	21	10%
	10-19 hrs	1	6%	4	10%	27	23%	8	31%	40	20%
	20-29 hrs	3	17%	3	8%	17	14%	4	15%	27	13%
	30-39 hrs	4	22%	9	23%	17	14%	2	8%	32	16%
	40-49 hrs	5	28%	5	13%	13	11%	1	4%	24	12%
	50-59 hrs	1	6%	5	13%	10	8%			16	8%
	60-69 hrs	1	6%	2	5%	1	1%			4	2%
	70-79 hrs	2	11%			2	2%			4	2%
	80 or more hrs			1	3%					1	0%

Table 118B

Time Preferred at Research – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred at research	0 hrs	3	7%	3	14%	12	19%	8	44%	26	18%
	1-9 hrs	3	7%	2	9%	9	15%	2	11%	16	11%
	10-19 hrs	5	12%	3	14%	20	32%	4	22%	32	22%
	20-29 hrs	12	28%	6	27%	10	16%	3	17%	31	21%
	30-39 hrs	7	16%	3	14%	5	8%	1	6%	16	11%
	40-49 hrs	7	16%	1	5%	3	5%			11	8%
	50-59 hrs	4	9%	3	14%					7	5%
	60-69 hrs	1	2%	1	5%	1	2%			3	2%
	70-79 hrs	1	2%			2	3%			3	2%
	80 or more hrs										

Table 119A

Time Preferred on Professional Growth – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred on professional growth	0 hrs	5	28%	19	49%	25	21%	5	19%	54	27%
	1-9 hrs	5	28%	9	23%	28	24%	7	27%	49	24%
	10-19 hrs	5	28%	9	23%	44	37%	7	27%	65	32%
	20-29 hrs	3	17%			20	17%	5	19%	28	14%
	30-39 hrs			1	3%	1	1%	2	8%	4	2%
	40-49 hrs			1	3%	1	1%			2	1%

Table 119B

Time Preferred on Professional Growth – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred on professional growth	0 hrs	16	37%	2	9%	13	21%	4	22%	35	24%
	1-9 hrs	9	21%	9	41%	12	19%	5	28%	35	24%
	10-19 hrs	15	35%	5	23%	31	50%	5	28%	56	39%
	20-29 hrs	3	7%	6	27%	5	8%	3	17%	17	12%
	30-39 hrs					1	2%	1	6%	2	1%
	40-49 hrs										

Table 120A

Time Preferred on Administration - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred on administration	0 hrs	12	67%	19	49%	69	58%	13	50%	113	56%
	1-9 hrs	4	22%	13	33%	16	13%	6	23%	39	19%
	10-19 hrs	2	11%	4	10%	22	18%	4	15%	32	16%
	20-29 hrs			2	5%	5	4%			7	3%
	30-39 hrs					5	4%	1	4%	6	3%
	40-49 hrs			1	3%	2	2%	1	4%	4	2%
	50-59 hrs							1	4%	1	0%

Table 120B

Time Preferred on Administration - Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred on administration	0 hrs	15	35%	4	18%	31	50%	6	33%	56	39%
	1-9 hrs	16	37%	11	50%	22	35%	6	33%	55	38%
	10-19 hrs	9	21%	4	18%	6	10%	4	22%	23	16%
	20-29 hrs			2	9%	2	3%			4	3%
	30-39 hrs	3	7%	1	5%					4	3%
	40-49 hrs					1	2%	1	6%	2	1%
	50-59 hrs							1	6%	1	1%

Table 121A

Time Preferred on Service Activity – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred on service activity	0 hrs	10	56%	21	54%	58	49%	12	46%	101	50%
	1-9 hrs	1	6%	15	38%	37	31%	12	46%	65	32%
	10-19 hrs	6	33%	1	3%	21	18%	2	8%	30	15%
	20-29 hrs	1	6%	2	5%	2	2%			5	2%
	30-39 hrs					1	1%			1	0%

Table 121B

Time Preferred on Service Activity – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred on service activity	0 hrs	15	35%	11	50%	36	58%	13	72%	75	52%
	1-9 hrs	17	40%	6	27%	20	32%	4	22%	47	32%
	10-19 hrs	10	23%	5	23%	6	10%	1	6%	22	15%
	20-29 hrs										
	30-39 hrs	1	2%							1	1%

Table 122A

Time Preferred on Consulting – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred on consulting	0 hrs	15	83%	33	85%	82	69%	18	69%	148	73%
	1-9 hrs	1	6%	3	8%	16	13%	4	15%	24	12%
	10-19 hrs	1	6%	2	5%	13	11%	3	12%	19	9%
	20-29 hrs	1	6%	1	3%	7	6%	1	4%	10	5%
	30-39 hrs										
	50-59 hrs					1	1%			1	0%
	60-69 hrs										
	80 or more hrs										

Table 122B

Time Preferred on Consulting – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Time preferred on consulting	0 hrs	29	67%	12	55%	39	63%	10	56%	90	62%
	1-9 hrs	10	23%	7	32%	10	16%	7	39%	34	23%
	10-19 hrs	2	5%	2	9%	5	8%			9	6%
	20-29 hrs	2	5%	1	5%	3	5%	1	6%	7	5%
	30-39 hrs					1	2%			1	1%
	50-59 hrs					2	3%			2	1%
	60-69 hrs					1	2%			1	1%
	80 or more hrs					1	2%			1	1%

Table 123A

Number of Undergraduate Committees Served On – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Number undergraduate committees served on	1	2	11%			7	6%			9	4%
	2	1	6%			2	2%	2	8%	5	2%
	3	1	6%			1	1%			2	1%
	4	2	11%			2	2%			4	2%
	5										
	6			1	3%	1	1%			2	1%
	7										
	10 or more	1	6%					1	4%	2	1%
	None/no answer	11	61%	38	97%	106	89%	23	88%	178	88%

Table 123B

Number of Undergraduate Committees Served On – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Number undergraduate committees served on	1	6	14%	1	5%	9	15%	2	11%	18	12%
	2	1	2%	1	5%	3	5%			5	3%
	3	2	5%	1	5%	2	3%			5	3%
	4					1	2%			1	1%
	5					2	3%	1	6%	3	2%
	6										
	7	1	2%							1	1%
	10 or more							1	6%	1	1%
	None/no answer	33	77%	19	86%	45	73%	14	78%	111	77%

Table 124A

Number of Graduate Committees Served On – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Number graduate committees served on	1	1	6%	4	10%	3	3%			8	4%
	2	2	11%	3	8%	7	6%	1	4%	13	6%
	3			2	5%	4	3%	1	4%	7	3%
	4	2	11%	2	5%	3	3%			7	3%
	5	1	6%			3	3%			4	2%
	6					2	2%			2	1%
	7					1	1%			1	0%
	8					1	1%			1	0%
	10 or more	5	28%	6	15%	7	6%			18	9%
	None/no answer	7	39%	22	56%	88	74%	24	92%	141	70%

Table 124B

Number of Graduate Committees Served On – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Number graduate committees served on	1	5	12%	2	9%	5	8%	1	6%	13	9%
	2	5	12%	1	5%	3	5%			9	6%
	3	5	12%	3	14%	3	5%			11	8%
	4	7	16%	1	5%	2	3%			10	7%
	5	2	5%			3	5%			5	3%
	6			1	5%	3	5%			4	3%
	7										
	8	1	2%			1	2%			2	1%
	10 or more	4	9%	2	9%					6	4%
	None/no answer	14	33%	12	55%	42	68%	17	94%	85	59%

Table 125A

Number Undergraduate Committees Chaired – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Number undergraduate committees chaired	1	2	11%			3	3%			5	2%
	2	1	6%	1	3%	2	2%	1	4%	5	2%
	3	1	6%			2	2%			3	1%
	4	3	17%			2	2%			5	2%
	5										
	10 or more										
None/no answer		11	61%	38	97%	110	92%	25	96%	184	91%

Table 125B

Number Undergraduate Committees Chaired – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Number undergraduate committees chaired	1	1	2%			5	8%	2	11%	8	6%
	2	1	2%			1	2%			2	1%
	3			1	5%					1	1%
	4										
	5					1	2%			1	1%
	10 or more							1	6%	1	1%
None/no answer		41	95%	21	95%	55	89%	15	83%	132	91%

Table 126A

Number Graduate Committees Chaired - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Number graduate committees chaired	1	1	6%	5	13%	5	4%			11	5%
	2	1	6%			2	2%			3	1%
	3										
	4	1	6%	2	5%	1	1%			4	2%
	6					1	1%			1	0%
	7					2	2%			2	1%
	8	1	6%	1	3%	1	1%			3	1%
	10 or more	3	17%	1	3%	4	3%			8	4%
	None/no answer	11	61%	30	77%	103	87%	26	100%	170	84%

Table 126B

Number Graduate Committees Chaired – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Number graduate committees chaired	1	7	16%	3	14%	3	5%			13	9%
	2	6	14%			3	5%			9	6%
	3	2	5%	1	5%	3	5%			6	4%
	4					1	2%			1	1%
	6	1	2%	1	5%	1	2%			3	2%
	7										
	8	2	5%							2	1%
	10 or more	1	2%	1	5%					2	1%
	None/no answer	24	56%	16	73%	51	82%	18	100%	109	75%

Table 127A
 Total Classes Taught -- Survey Year 1993

Total classes taught	Institutional type												Total	
	Research		Doctoral		Comprehensive		Liberal Arts						Count	Col %
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %		
0			1	3%	1	1%							2	1%
1	5	28%	4	10%	3	3%							12	6%
2	7	39%	12	31%	24	20%	3	12%					46	23%
3	3	17%	11	28%	31	26%	6	23%					51	25%
4	2	11%	9	23%	45	38%	11	42%					67	33%
5					6	5%	3	12%					9	4%
6			1	3%									1	0%
7					4	3%	2	8%					6	3%
8					2	2%	1	4%					3	1%
9					1	1%							1	0%
10	1	6%											1	0%
11					1	1%							1	0%
12			1	3%									1	0%
16					1	1%							1	0%
20													1	0%

Table 127B

Total Classes Taught – Survey Year 1999

	Institutional type								Total	
	Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
	Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Total classes taught	0		1	5%			1	6%	2	1%
	1	8	19%	2	9%				10	7%
	2	16	37%	8	36%	13	21%	2	39	27%
	3	11	26%	9	41%	18	29%	3	41	28%
	4	2	5%	1	5%	19	31%	8	30	21%
	5	4	9%	1	5%	6	10%	2	13	9%
	6	1	2%			3	5%	1	5	3%
	7					1	2%		1	1%
	8									
	9	1	2%						1	1%
	10							1	1	1%
	11									
	12									
	16									
	20					2	3%		2	1%

Table 128
Total Courses Taught – Survey Year 1999

	Institutional type										Total	
	Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %	Count	Col %
	Count	Col %	Count	Col %	Count	Col %	Count	Col %				
0			1	5%						1	1%	
1	15	35%	3	14%	2	3%	1	6%		21	15%	
2	16	37%	11	52%	29	47%	3	18%		59	41%	
3	7	16%	5	24%	20	32%	5	29%		37	26%	
4	2	5%	1	5%	9	15%	6	35%		18	13%	
5	3	7%			2	3%	1	6%		6	4%	
8							1	6%		1	1%	

Table 129

Remedial Classes Taught – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Remedial classes taught	0	42	98%	18	86%	58	94%	16	94%	134	94%
	1	1	2%	2	10%	3	5%			6	4%
	2							1	6%	1	1%
	3					1	2%			1	1%
	4			1	5%					1	1%

Table 130

Continuing Education Classes Taught – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Classes taught, continuing education	0	42	98%	19	90%	57	92%	14	82%	132	92%
	1	1	2%	1	5%	3	5%	2	12%	7	5%
	2			1	5%					1	1%
	4							1	6%	1	1%
	5					1	2%			1	1%
	7					1	2%			1	1%

Table 131A

Total Office Hours Per Week – Survey Year 1993

	Institutional type									Total	
	Research			Doctoral		Comprehensive		Liberal Arts		Count	Col %
	Count	Col %		Count	Col %	Count	Col %	Count	Col %		
Total	0	2	11%	4	10%	5	4%	1	4%	12	6%
office	1					1	1%			1	0%
hours/week	2	4	22%	2	5%	4	3%			10	5%
	3	3	17%	5	13%	11	9%	5	19%	24	12%
	4	4	22%	6	15%	11	9%	4	15%	25	12%
	5			2	5%	30	25%	1	4%	33	16%
	6	1	6%	6	15%	6	5%	5	19%	18	9%
	7			2	5%	3	3%			5	2%
	8	2	11%	2	5%	9	8%			13	6%
	9			1	3%	2	2%	1	4%	4	2%
	10	1	6%	5	13%	27	23%	4	15%	37	18%
	11										
	12	1	6%	1	3%	5	4%	3	12%	10	5%
	14			1	3%					1	0%
	15					1	1%			1	0%
	16					1	1%			1	0%
	20										
	23							1	4%	1	0%
	25			1	3%	1	1%			2	1%
	35										
	36					1	1%	1	4%	2	1%
	40					1	1%			1	0%
	43			1	3%					1	0%

Table 131B

Total Office Hours Per Week – Survey Year 1999

	Institutional type									Total	
	Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %	
	Count	Col %	Count	Col %	Count	Col %	Count	Col %			
Total	0	1	2%	2	9%	2	3%			5	3%
office	1	2	5%	2	9%	2	3%			6	4%
hours/week	2	6	14%	1	5%	2	3%	1	6%	10	7%
	3	5	12%	3	14%	6	10%	1	6%	15	10%
	4	11	26%	6	27%	3	5%	1	6%	21	14%
	5	4	9%	1	5%	18	29%	3	17%	26	18%
	6	7	16%	2	9%	7	11%	3	17%	19	13%
	7					3	5%	1	6%	4	3%
	8	3	7%	2	9%	1	2%	3	17%	9	6%
	9			2	9%	5	8%	1	6%	8	6%
	10	2	5%			7	11%	3	17%	12	8%
	11					1	2%			1	1%
	12			1	5%	2	3%			3	2%
	14										
	15	1	2%			1	2%			2	1%
	16										
	20					1	2%			1	1%
	23							1	6%	1	1%
	25										
	35	1	2%							1	1%
	36										
	40					1	2%			1	1%
	43										

Table 132A

Any Creative Work / Writing / Research – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Any creative	Yes	17	94%	28	72%	77	65%	12	46%	134	66%
work/writing/research	No	1	6%	11	28%	42	35%	14	54%	68	34%

Table 132B

Any Creative Work / Writing / Research – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Any creative	Yes	32	74%	16	73%	31	50%	6	33%	85	59%
work/writing/research	No	11	26%	6	27%	31	50%	12	67%	60	41%

Table 133A

Type of Primary Work / Writing / Research – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Type of primary work/ writing/ research	Basic research	11	61%	12	31%	14	12%			37	18%
	Applied or policy-oriented research or analysis	5	28%	13	33%	46	39%	7	27%	71	35%
	Literary, performance or exhibitions	1	6%	1	3%	1	1%			3	1%
	Program/ curriculum design and development			1	3%	16	13%	5	19%	22	11%
	Other			1	3%					1	0%
	Not applicable/ missing	1	6%	11	28%	42	35%	14	54%	68	34%

Table 133B

Type of Primary Work / Writing / Research – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Type of primary work/ writing/ research	Basic research	19	44%	10	45%	14	23%	1	6%	44	30%
	Applied or policy-oriented research or analysis	9	21%	3	14%	6	10%	1	6%	19	13%
	Literary, performance or exhibitions	1	2%	1	5%	2	3%	1	6%	5	3%
	Program/ curriculum design and development	3	7%	2	9%	9	15%	3	17%	17	12%
	Other										
	Not applicable/ missing	11	26%	6	27%	31	50%	12	67%	60	41%

Table 134A

Any Funded Research – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Any funded research	Yes	7	39%	10	26%	16	13%	3	12%	36	18%
	No	10	56%	18	46%	61	51%	9	35%	98	49%
	Missing	1	6%	11	28%	42	35%	14	54%	68	34%

Table 134B

Any Funded Research – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Any funded research	Yes	19	44%	8	36%	13	21%	2	11%	42	29%
	No	24	56%	14	64%	49	79%	16	89%	103	71%
	Missing										

Table 135A

Principal Investigator / Co-Principal Investigator on Grants or Contracts – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
PI/Co-PI on any grants or contracts	Yes	6	33%	9	23%	13	11%	1	4%	29	14%
	No	1	6%	1	3%	3	3%	2	8%	7	3%
	Missing	11	61%	29	74%	103	87%	23	88%	166	82%

Table 135B

Principal Investigator / Co-Principal Investigator on Grants or Contracts – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
PI/Co-PI on any grants or contracts	Yes	15	35%	5	23%	9	15%	2	11%	31	21%
	No	28	65%	17	77%	53	85%	16	89%	114	79%
	Missing										

Table 136A

Receive Internal Funds for Tuition Remission – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Internal tuition remission funds	Yes	3	17%	8	21%	8	7%			19	9%
	No, although funds were available	5	28%	16	41%	45	38%	16	62%	82	41%
	No, no funds were available, or not eligible	10	56%	15	38%	66	55%	10	38%	101	50%
	No, don't know if funds were available										

Table 136B

Receive Internal Funds for Tuition Remission – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Internal tuition remission funds	Yes	8	19%	3	14%	5	8%	3	17%	19	13%
	No, although funds were available	15	35%	9	41%	25	40%	4	22%	53	37%
	No, no funds were available, or not eligible	8	19%	6	27%	12	19%	6	33%	32	22%
	No, don't know if funds were available	12	28%	4	18%	20	32%	5	28%	41	28%

Table 137A

Receive Internal Funds for Professional Association Memberships – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Internal prof. assoc. funds	Yes	4	22%	8	21%	29	24%	9	35%	50	25%
	No, although funds were available	2	11%	4	10%	14	12%	2	8%	22	11%
	No, no funds were available, or not eligible	12	67%	27	69%	76	64%	15	58%	130	64%
	No, don't know if funds were available										

Table 137B

Receive Internal Funds for Professional Association Memberships – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Internal prof. assoc. funds	Yes	12	28%	1	5%	21	34%	8	44%	42	29%
	No, although funds were available	5	12%	3	14%	7	11%	1	6%	16	11%
	No, no funds were available, or not eligible	16	37%	13	59%	22	35%	5	28%	56	39%
	No, don't know if funds were available	10	23%	5	23%	12	19%	4	22%	31	21%

Table 138A

Receive Internal Funds for Professional Travel – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Internal prof. travel funds	Yes	9	50%	16	41%	59	50%	15	58%	99	49%
	No, although funds were available	3	17%	12	31%	29	24%	8	31%	52	26%
	No, no funds were available, or not eligible	6	33%	11	28%	31	26%	3	12%	51	25%
	No, don't know if funds were available										

Table 138B

Receive Internal Funds for Professional Travel – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Internal prof. travel funds	Yes	27	63%	12	55%	39	63%	14	78%	92	63%
	No, although funds were available	6	14%	7	32%	13	21%	3	17%	29	20%
	No, no funds were available, or not eligible	7	16%	3	14%	8	13%	1	6%	19	13%
	No, don't know if funds were available	3	7%			2	3%			5	3%

Table 139A

Receive Internal Funds for Training to Improve Research or Teaching – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Internal training to improve res/teachng	Yes	1	6%	4	10%	19	16%	6	23%	30	15%
	No, although funds were available	2	11%	11	28%	30	25%	8	31%	51	25%
	No, no funds were available, or not eligible	15	83%	24	62%	70	59%	12	46%	121	60%
	No, don't know if funds were available										

Table 139B

Receive Internal Funds for Training to Improve Research or Teaching – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Internal training to improve res/teachng	Yes	12	28%	6	27%	17	27%	4	22%	39	27%
	No, although funds were available	9	21%	8	36%	21	34%	10	56%	48	33%
	No, no funds were available, or not eligible	12	28%	6	27%	12	19%	3	17%	33	23%
	No, don't know if funds were available	10	23%	2	9%	12	19%	1	6%	25	17%

Table 140A

Receive Internal Funds for Sabbatical Leave – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Internal sabbatical leave	Yes	1	6%	5	13%	9	8%	1	4%	16	8%
	No, although funds were available	7	39%	16	41%	49	41%	15	58%	87	43%
	No, no funds were available, or not eligible	10	56%	18	46%	61	51%	10	38%	99	49%
	No, don't know if funds were available										

Table 140B

Receive Internal Funds for Sabbatical Leave – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Internal sabbatical leave	Yes	3	7%	1	5%	2	3%			6	4%
	No, although funds were available	21	49%	8	36%	18	29%	5	28%	52	36%
	No, no funds were available, or not eligible	14	33%	11	50%	32	52%	9	50%	66	46%
	No, don't know if funds were available	5	12%	2	9%	10	16%	4	22%	21	14%

Table 141A

Satisfaction with Authority to Decide Course Content – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with authority to decide course content	Not applicable			2	5%	5	4%			7	3%
	Very dissatisfied					5	4%			5	2%
	Somewhat dissatisfied			2	5%	2	2%	1	4%	5	2%
	Somewhat satisfied	4	22%	3	8%	27	23%	3	12%	37	18%
	Very satisfied	14	78%	32	82%	80	67%	22	85%	148	73%

Table 141B

Satisfaction with Authority to Decide Course Content – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with authority to decide course content	Not applicable										
	Very dissatisfied			1	5%					1	1%
	Somewhat dissatisfied	3	7%			1	2%	2	11%	6	4%
	Somewhat satisfied	3	7%	7	32%	8	13%	4	22%	22	15%
	Very satisfied	37	86%	14	64%	53	85%	12	67%	116	80%

Table 142A

Satisfaction with Authority to Decide Courses Taught – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with authority to decide courses taught	Not applicable	1	6%	2	5%	6	5%			9	4%
	Very dissatisfied	1	6%			7	6%	1	4%	9	4%
	Somewhat dissatisfied	4	22%	9	23%	11	9%	1	4%	25	12%
	Somewhat satisfied	7	39%	14	36%	50	42%	14	54%	85	42%
	Very satisfied	5	28%	14	36%	45	38%	10	38%	74	37%

Table 142B

Satisfaction with Authority to Decide Courses Taught – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with authority to decide courses taught	Not applicable										
	Very dissatisfied	2	5%	2	9%	2	3%	1	6%	7	5%
	Somewhat dissatisfied	4	9%	2	9%	3	5%	2	11%	11	8%
	Somewhat satisfied	21	49%	9	41%	27	44%	11	61%	68	47%
	Very satisfied	16	37%	9	41%	30	48%	4	22%	59	41%

Table 143A

Satisfaction with Authority to Make Other Job Decisions – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with authority to make other job decision	Not applicable	1	6%	3	8%	8	7%			12	6%
	Very dissatisfied					13	11%	1	4%	14	7%
	Somewhat dissatisfied	4	22%	6	15%	25	21%	2	8%	37	18%
	Somewhat satisfied	10	56%	16	41%	51	43%	14	54%	91	45%
	Very satisfied	3	17%	14	36%	22	18%	9	35%	48	24%

Table 143B

Satisfaction with Authority to Make Other Job Decisions – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with authority to make other job decision	Not applicable			5	23%	6	10%	2	11%	14	10%
	Very dissatisfied	1	2%	4	18%	11	18%	5	28%	26	18%
	Somewhat dissatisfied	6	14%	8	36%	25	40%	6	33%	58	40%
	Somewhat satisfied	19	44%	5	23%	20	32%	5	28%	47	32%
	Very satisfied	17	40%								

Table 144A

Satisfaction with Time Available to Advise Students – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with time available to advise students	Not applicable	1	6%	2	5%	6	5%			9	4%
	Very dissatisfied					5	4%	1	4%	6	3%
	Somewhat dissatisfied	4	22%	6	15%	13	11%	3	12%	26	13%
	Somewhat satisfied	9	50%	18	46%	59	50%	12	46%	98	49%
	Very satisfied	4	22%	13	33%	36	30%	10	38%	63	31%

Table 144B

Satisfaction with Time Available to Advise Students – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with time available to advise students	Not applicable										
	Very dissatisfied	2	5%	3	14%	2	3%			7	5%
	Somewhat dissatisfied	8	19%	2	9%	7	11%	6	33%	23	16%
	Somewhat satisfied	18	42%	10	45%	31	50%	8	44%	67	46%
	Very satisfied	15	35%	7	32%	22	35%	4	22%	48	33%

Table 145A

Satisfaction with Quality of Undergraduate Students – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with quality of undergrad students	Not applicable			3	8%	6	5%	1	4%	10	5%
	Very dissatisfied			3	8%	14	12%	1	4%	18	9%
	Somewhat dissatisfied	8	44%	11	28%	35	29%	7	27%	61	30%
	Somewhat satisfied	9	50%	14	36%	47	39%	14	54%	84	42%
	Very satisfied	1	6%	8	21%	17	14%	3	12%	29	14%

Table 145B

Satisfaction with Quality of Undergraduate Students – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with quality of undergrad students	Not applicable			2	9%					2	1%
	Very dissatisfied	4	9%	5	23%	8	13%	3	17%	20	14%
	Somewhat dissatisfied	12	28%	4	18%	19	31%	4	22%	39	27%
	Somewhat satisfied	21	49%	7	32%	22	35%	10	56%	60	41%
	Very satisfied	6	14%	4	18%	13	21%	1	6%	24	17%

Table 146A

Satisfaction with Quality of Graduate Students – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with quality of graduate students	Not applicable	2	11%	5	13%	43	36%	15	58%	65	32%
	Very dissatisfied			1	3%	7	6%			8	4%
	Somewhat dissatisfied	5	28%	7	18%	16	13%	2	8%	30	15%
	Somewhat satisfied	5	28%	14	36%	40	34%	7	27%	66	33%
	Very satisfied	6	33%	12	31%	13	11%	2	8%	33	16%

Table 146B

Satisfaction with Quality of Graduate Students – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with quality of graduate students	Not applicable	5	12%	4	18%	26	42%	15	83%	50	34%
	Very dissatisfied	4	9%	2	9%	4	6%			10	7%
	Somewhat dissatisfied	7	16%	5	23%	8	13%	1	6%	21	14%
	Somewhat satisfied	20	47%	7	32%	19	31%			46	32%
	Very satisfied	7	16%	4	18%	5	8%	2	11%	18	12%

Table 147A

Satisfaction with Workload – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with work load	Very dissatisfied	2	11%	3	8%	14	12%	2	8%	21	10%
	Somewhat dissatisfied	5	28%	7	18%	29	24%	4	15%	45	22%
	Somewhat satisfied	9	50%	15	38%	47	39%	12	46%	83	41%
	Very satisfied	2	11%	14	36%	29	24%	8	31%	53	26%

Table 147B

Satisfaction with Workload – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with work load	Very dissatisfied	4	9%	3	14%	8	13%	5	28%	20	14%
	Somewhat dissatisfied	10	23%	7	32%	24	39%	6	33%	47	32%
	Somewhat satisfied	20	47%	10	45%	20	32%	5	28%	55	38%
	Very satisfied	9	21%	2	9%	10	16%	2	11%	23	16%

Table 148A

Satisfaction with Advancement Opportunities – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with advancement opportunity	Very dissatisfied	3	17%	6	15%	21	18%	3	12%	33	16%
	Somewhat dissatisfied	7	39%	6	15%	28	24%	5	19%	46	23%
	Somewhat satisfied	6	33%	14	36%	44	37%	11	42%	75	37%
	Very satisfied	2	11%	13	33%	26	22%	7	27%	48	24%

Table 148B

Satisfaction with Advancement Opportunities – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with advancement opportunity	Very dissatisfied	2	5%	4	18%	7	11%	3	17%	16	11%
	Somewhat dissatisfied	12	28%	3	14%	14	23%	2	11%	31	21%
	Somewhat satisfied	14	33%	12	55%	30	48%	9	50%	65	45%
	Very satisfied	15	35%	3	14%	11	18%	4	22%	33	23%

Table 149A

Satisfaction with Time to Keep Current in Field – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with time to keep current in field	Very dissatisfied	2	11%	4	10%	23	19%	6	23%	35	17%
	Somewhat dissatisfied	10	56%	15	38%	50	42%	11	42%	86	43%
	Somewhat satisfied	4	22%	12	31%	34	29%	7	27%	57	28%
	Very satisfied	2	11%	8	21%	12	10%	2	8%	24	12%

Table 149B

Satisfaction with Time to Keep Current in Field – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with time to keep current in field	Very dissatisfied	6	14%	5	23%	20	32%	8	44%	39	27%
	Somewhat dissatisfied	20	47%	6	27%	22	35%	6	33%	54	37%
	Somewhat satisfied	11	26%	11	50%	15	24%	4	22%	41	28%
	Very satisfied	6	14%			5	8%			11	8%

Table 150A

Satisfaction with Freedom to Do Consulting – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with freedom to do consulting	Very dissatisfied	2	11%	1	3%	9	8%	3	12%	15	7%
	Somewhat dissatisfied	4	22%	4	10%	21	18%	5	19%	34	17%
	Somewhat satisfied	7	39%	17	44%	46	39%	11	42%	81	40%
	Very satisfied	5	28%	17	44%	43	36%	7	27%	72	36%

Table 150B

Satisfaction with Freedom to Do Consulting – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with freedom to do consulting	Very dissatisfied			1	5%	1	2%	3	17%	5	3%
	Somewhat dissatisfied	5	12%	4	18%	15	24%	2	11%	26	18%
	Somewhat satisfied	21	49%	10	45%	22	35%	10	56%	63	43%
	Very satisfied	17	40%	7	32%	24	39%	3	17%	51	35%

Table 151A

Satisfaction with Job Overall – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with job overall	Very dissatisfied			1	3%	5	4%	3	12%	9	4%
	Somewhat dissatisfied	4	22%	8	21%	18	15%	1	4%	31	15%
	Somewhat satisfied	11	61%	17	44%	72	61%	11	42%	111	55%
	Very satisfied	3	17%	13	33%	24	20%	11	42%	51	25%

Table 151B

Satisfaction with Job Overall – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with job overall	Very dissatisfied	1	2%	2	9%	4	6%	2	11%	9	6%
	Somewhat dissatisfied	9	21%	5	23%	13	21%	3	17%	30	21%
	Somewhat satisfied	28	65%	12	55%	31	50%	12	67%	83	57%
	Very satisfied	5	12%	3	14%	14	23%	1	6%	23	16%

Table 152A

Decision to Leave: How Important Advancement Opportunities? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: advancement opportunities?	Not important			6	15%	11	9%	1	4%	18	9%
	Somewhat important	9	50%	15	38%	41	34%	7	27%	72	36%
	Very important	9	50%	18	46%	67	56%	18	69%	112	55%

Table 152B

Decision to Leave: How Important Advancement Opportunities? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: advancement opportunities?	Not important	6	14%			11	18%	1	6%	18	12%
	Somewhat important	12	28%	10	45%	22	35%	7	39%	51	35%
	Very important	25	58%	12	55%	29	47%	10	56%	76	52%

Table 153A

Decision to Leave: How Important No Pressure to Publish? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: no pressure to publish?	Not important	8	44%	16	41%	34	29%	2	8%	60	30%
	Somewhat important	9	50%	13	33%	47	39%	13	50%	82	41%
	Very important	1	6%	10	26%	38	32%	11	42%	60	30%

Table 153B

Decision to Leave: How Important No Pressure to Publish? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: no pressure to publish?	Not important	15	35%	8	36%	18	29%	2	11%	43	30%
	Somewhat important	22	51%	11	50%	24	39%	6	33%	63	43%
	Very important	6	14%	3	14%	20	32%	10	56%	39	27%

Table 154A

Decision to Leave: How Important Teaching Opportunities? - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: teaching opportunities?	Not important	4	22%	11	28%	32	27%	5	19%	52	26%
	Somewhat important	10	56%	15	38%	50	42%	7	27%	82	41%
	Very important	4	22%	13	33%	37	31%	14	54%	68	34%

Table 154B

Decision to Leave: How Important Teaching Opportunities? - Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: teaching opportunities?	Not important	15	35%	6	27%	20	32%			41	28%
	Somewhat important	20	47%	9	41%	23	37%	11	61%	63	43%
	Very important	8	19%	7	32%	19	31%	7	39%	41	28%

Table 155A

Decision to Leave: How Important Research Opportunities? - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: research opportunities?	Not important	4	22%	17	44%	31	26%	6	23%	58	29%
	Somewhat important	5	28%	7	18%	46	39%	16	62%	74	37%
	Very important	9	50%	15	38%	42	35%	4	15%	70	35%

Table 155B

Decision to Leave: How Important Research Opportunities? - Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: research opportunities?	Not important	10	23%	4	18%	21	34%	10	56%	45	31%
	Somewhat important	12	28%	9	41%	26	42%	5	28%	52	36%
	Very important	21	49%	9	41%	15	24%	3	17%	48	33%

Table 156A

Academic Rank, Title, or Job – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Academic rank, title or job	Professor	3	17%	11	28%	27	23%	4	15%	45	22%
	Associate professor	2	11%	5	13%	30	25%	5	19%	42	21%
	Assistant professor	9	50%	12	31%	42	35%	11	42%	74	37%
	Instructor	1	6%	5	13%	16	13%	5	19%	27	13%
	Lecturer	2	11%	3	8%	2	2%	1	4%	8	4%
	Other	1	6%	3	8%	2	2%			6	3%

Table 156B

Academic Rank, Title, or Job – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Academic rank, title or job	Professor	12	28%	5	23%	12	19%	2	11%	31	21%
	Associate professor	13	30%	3	14%	20	32%	9	50%	45	31%
	Assistant professor	12	28%	11	50%	17	27%	3	17%	43	30%
	Instructor	1	2%	2	9%	7	11%	4	22%	14	10%
	Lecturer	5	12%	1	5%	6	10%			12	8%
	Other										

Table 157A

Tenure Status – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Tenure status	Tenured	5	28%	17	44%	65	55%	7	27%	94	47%
	On tenure track, but not tenured	8	44%	9	23%	36	30%	9	35%	62	31%
	Not on tenure track, although institution has a tenure system	2	11%	12	31%	13	11%	6	23%	33	16%
	No tenure system at this institution	3	17%	1	3%	5	4%	4	15%	13	6%

Table 157B

Tenure Status – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Tenure status	Tenured	25	58%	9	41%	29	47%	9	50%	72	50%
	On tenure track, but not tenured	11	26%	7	32%	18	29%	5	28%	41	28%
	Not on tenure track, although institution has a tenure system	7	16%	5	23%	12	19%	3	17%	27	19%
	No tenure system at this institution			1	5%	3	5%	1	6%	5	3%

Table 158A
Duration of Contract – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Duration of contract	Unspecified duration, or tenured	2	11%	2	5%	3	3%	4	15%	11	5%
	One academic term	2	11%	4	10%	10	8%	2	8%	18	9%
	One academic year or one calendar year	6	33%	11	28%	38	32%	10	38%	65	32%
	Two or more academic/calendar years	3	17%	5	13%	3	3%	3	12%	14	7%
	Other										
	Missing	5	28%	17	44%	65	55%	7	27%	94	47%

Table 158B

Duration of Contract – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Duration of contract	Unspecified duration, or tenured	27	63%	9	41%	30	48%	11	61%	77	53%
	One academic term	2	5%	2	9%	7	11%			11	8%
	One academic year or one calendar year	3	7%	6	27%	20	32%	6	33%	35	24%
	Two or more academic/calendar years	9	21%	5	23%	4	6%	1	6%	19	13%
	Other	2	5%			1	2%			3	2%
Missing											

Table 159A

Number of Years in Current Job – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Number of years in current job	1-5 years	11	61%	18	46%	50	42%	15	58%	94	47%
	6-10 years	5	28%	12	31%	22	18%	8	31%	47	23%
	11-15 years			4	10%	25	21%	1	4%	30	15%
	16-20 years	2	11%	1	3%	6	5%			9	4%
	21-25 years			2	5%	12	10%	1	4%	15	7%
	26-30 years					4	3%	1	4%	5	2%
	More than 30 years			2	5%					2	1%

Table 159B

Number of Years in Current Job – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Number of years in current job	1-5 years	17	40%	9	41%	23	37%	6	33%	55	38%
	6-10 years	4	9%	5	23%	11	18%	4	22%	24	17%
	11-15 years	9	21%	2	9%	8	13%	3	17%	22	15%
	16-20 years	5	12%	4	18%	8	13%	2	11%	19	13%
	21-25 years	5	12%			5	8%	1	6%	11	8%
	26-30 years	2	5%	2	9%	1	2%	2	11%	7	5%
	More than 30 years	1	2%			6	10%			7	5%

Table 160

Number of Positions in Higher Education During Career – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Positions in higher ed during career	1	29	67%	12	55%	38	61%	10	56%	89	61%
	2	2	5%	1	5%	6	10%	2	11%	11	8%
	3	3	7%	6	27%	11	18%	4	22%	24	17%
	4	3	7%	2	9%	3	5%			8	6%
	5	1	2%			4	6%	1	6%	6	4%
	6	3	7%							3	2%
	8	1	2%	1	5%			1	6%	3	2%
	11	1	2%							1	1%

Table 161

Years Teaching in Higher Education Institutions – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Years teaching in higher ed institutions	1-5 years	7	16%	3	14%	13	21%	2	11%	25	17%
	6-10 years	7	16%	7	32%	14	23%	3	17%	31	21%
	11-15 years	7	16%	6	27%	9	15%	4	22%	26	18%
	16-20 years	9	21%	2	9%	9	15%	6	33%	26	18%
	21-25 years	5	12%			6	10%	1	6%	12	8%
	26-30 years	3	7%	4	18%	5	8%	2	11%	14	10%
	More than 30 years	5	12%			6	10%			11	8%

Table 162A

Employed Only at Current Institution? - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Employed only at this institution?	Inst only employ	17	94%	34	87%	97	82%	20	77%	168	83%
	Other employment	1	6%	5	13%	22	18%	6	23%	34	17%

Table 162B

Employed Only at Current Institution? - Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Employed only at this institution?	Inst only employ	22	51%	7	32%	36	58%	7	39%	72	50%
	Other employment	21	49%	15	68%	26	42%	11	61%	73	50%

Table 163A

Other Employment in Year of Survey, Number of Positions – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Other employment in year of survey, number of positions	1			4	10%	15	13%	4	15%	23	11%
	2					3	3%	2	8%	5	2%
	3			1	3%	3	3%			4	2%
	4	1	6%							1	0%
	6					1	1%			1	0%
	7										
	Missing	17	94%	34	87%	97	82%	20	77%	168	83%

Table 163B

Other Employment in Year of Survey, Number of Positions – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Other employment in year of survey, number of positions	1	9	21%	6	27%	11	18%	6	33%	32	22%
	2	3	7%	2	9%	5	8%	1	6%	11	8%
	3			2	9%			2	11%	4	3%
	4										
	6										
	7	1	2%							1	1%
	Missing	30	70%	12	55%	46	74%	9	50%	97	67%

Table 164A

Rating of Research Equipment, Instruments – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of research equipment, instruments	Poor			1	3%	23	19%	3	12%	27	13%
	Fair	1	6%	5	13%	23	19%	6	23%	35	17%
	Good	9	50%	21	54%	39	33%	7	27%	76	38%
	Excellent	5	28%	2	5%	8	7%	3	12%	18	9%
	Not available/Not applicable/Don't know	3	17%	10	26%	26	22%	7	27%	46	23%

Table 164B

Rating of Research Equipment, Instruments – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of research equipment, instruments	Poor	2	5%	3	14%	14	23%	5	28%	24	17%
	Fair	14	33%	5	23%	20	32%	4	22%	43	30%
	Good	10	23%	11	50%	13	21%	4	22%	38	26%
	Excellent	9	21%	2	9%	9	15%			20	14%
	Not available/Not applicable/Don't know	8	19%	1	5%	6	10%	5	28%	20	14%

Table 165A

Rating of Laboratory Space, Supplies - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of laboratory space and supplies	Poor			1	3%	16	13%	3	12%	20	10%
	Fair	1	6%	10	26%	23	19%	5	19%	39	19%
	Good	9	50%	13	33%	43	36%	9	35%	74	37%
	Excellent	4	22%	4	10%	11	9%	4	15%	23	11%
	Not available/Not applicable/Don't know	4	22%	11	28%	26	22%	5	19%	46	23%

Table 165B

Rating of Laboratory Space, Supplies - Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of laboratory space and supplies	Poor	6	14%	4	18%	11	18%	5	28%	26	18%
	Fair	13	30%	9	41%	22	35%	4	22%	48	33%
	Good	9	21%	5	23%	15	24%	4	22%	33	23%
	Excellent	6	14%	1	5%	6	10%			13	9%
	Not available/Not applicable/Don't know	9	21%	3	14%	8	13%	5	28%	25	17%

Table 166A

Rating of Availability of Research Assistants – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of availability of research assistants	Poor	2	11%	5	13%	33	28%	3	12%	43	21%
	Fair	3	17%	17	44%	20	17%	3	12%	43	21%
	Good	6	33%	9	23%	16	13%	4	15%	35	17%
	Excellent	3	17%	2	5%					5	2%
	Not available/Not applicable/Don't know	4	22%	6	15%	50	42%	16	62%	76	38%

Table 166B

Rating of Availability of Research Assistants – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of availability of research assistants	Poor	13	30%	8	36%	26	42%	6	33%	53	37%
	Fair	7	16%	5	23%	10	16%	1	6%	23	16%
	Good	11	26%	4	18%	1	2%			16	11%
	Excellent	2	5%			3	5%			5	3%
	Not available/Not applicable/Don't know	10	23%	5	23%	22	35%	11	61%	48	33%

Table 167A

Rating of Computers and Local Networks – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of computers and local networks	Poor			2	5%	6	5%	2	8%	10	5%
	Fair	1	6%	3	8%	21	18%	5	19%	30	15%
	Good	8	44%	17	44%	47	39%	12	46%	84	42%
	Excellent	8	44%	12	31%	38	32%	5	19%	63	31%
	Not available/Not applicable/Don't know	1	6%	5	13%	7	6%	2	8%	15	7%

Table 167B

Rating of Computers and Local Networks – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of computers and local networks	Poor	1	2%	2	9%	4	6%			7	5%
	Fair	13	30%	2	9%	10	16%	3	17%	28	19%
	Good	12	28%	11	50%	30	48%	11	61%	64	44%
	Excellent	17	40%	6	27%	17	27%	3	17%	43	30%
	Not available/Not applicable/Don't know			1	5%	1	2%	1	6%	3	2%

Table 168A

Rating of Centralized Computer Facilities – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of centralized computer facilities	Poor					11	9%	4	15%	15	7%
	Fair	1	6%	5	13%	27	23%	5	19%	38	19%
	Good	8	44%	18	46%	49	41%	8	31%	83	41%
	Excellent	4	22%	6	15%	19	16%	2	8%	31	15%
	Not available/Not applicable/Don't know	5	28%	10	26%	13	11%	7	27%	35	17%

Table 168B

Rating of Centralized Computer Facilities – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of centralized computer facilities	Poor	3	7%	3	14%	10	16%	2	11%	18	12%
	Fair	9	21%	1	5%	12	19%	9	50%	31	21%
	Good	11	26%	12	55%	22	35%	4	22%	49	34%
	Excellent	11	26%			12	19%	1	6%	24	17%
	Not available/Not applicable/Don't know	9	21%	6	27%	6	10%	2	11%	23	16%

Table 169A

Rating of Internet Connections – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of Internet connections	Poor			2	5%	15	13%	5	19%	22	11%
	Fair	1	6%	3	8%	18	15%	6	23%	28	14%
	Good	5	28%	22	56%	47	39%	8	31%	82	41%
	Excellent	10	56%	6	15%	20	17%	1	4%	37	18%
	Not available/Not applicable/Don't know	2	11%	6	15%	19	16%	6	23%	33	16%

Table 169B

Rating of Internet Connections – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of Internet connections	Poor	2	5%	2	9%	4	6%			8	6%
	Fair	4	9%	2	9%	9	15%	3	17%	18	12%
	Good	17	40%	9	41%	29	47%	9	50%	64	44%
	Excellent	18	42%	8	36%	20	32%	5	28%	51	35%
	Not available/Not applicable/Don't know	2	5%	1	5%			1	6%	4	3%

Table 170A

Rating of Audio-visual Equipment – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of audio-visual equipment	Poor			1	3%	8	7%	3	12%	12	6%
	Fair	2	11%	9	23%	31	26%	5	19%	47	23%
	Good	11	61%	20	51%	59	50%	15	58%	105	52%
	Excellent	1	6%	4	10%	10	8%	1	4%	16	8%
	Not available/Not applicable/Don't know	4	22%	5	13%	11	9%	2	8%	22	11%

Table 170B

Rating of Audio-visual Equipment – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of audio-visual equipment	Poor	5	12%	3	14%	6	10%	2	11%	16	11%
	Fair	13	30%	4	18%	14	23%	9	50%	40	28%
	Good	16	37%	11	50%	33	53%	5	28%	65	45%
	Excellent	8	19%	3	14%	7	11%	1	6%	19	13%
	Not available/Not applicable/Don't know	1	2%	1	5%	2	3%	1	6%	5	3%

Table 171A

Rating of Classroom Space – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of classroom space	Poor					5	4%			5	2%
	Fair	1	6%	12	31%	19	16%	6	23%	38	19%
	Good	15	83%	19	49%	73	61%	13	50%	120	59%
	Excellent			5	13%	17	14%	6	23%	28	14%
	Not available/Not applicable/Don't know	2	11%	3	8%	5	4%	1	4%	11	5%

Table 171B

Rating of Classroom Space – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of classroom space	Poor	8	19%	3	14%	6	10%	1	6%	18	12%
	Fair	16	37%	5	23%	22	35%	6	33%	49	34%
	Good	14	33%	11	50%	25	40%	9	50%	59	41%
	Excellent	5	12%	3	14%	9	15%	1	6%	18	12%
	Not available/Not applicable/Don't know							1	6%	1	1%

Table 172A

Rating of Office Space – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of office space	Poor			2	5%	8	7%	3	12%	13	6%
	Fair	2	11%	9	23%	19	16%	3	12%	33	16%
	Good	10	56%	22	56%	64	54%	13	50%	109	54%
	Excellent	6	33%	4	10%	21	18%	5	19%	36	18%
	Not available/Not applicable/Don't know			2	5%	7	6%	2	8%	11	5%

Table 172B

Rating of Office Space – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of office space	Poor	6	14%	2	9%	10	16%	1	6%	19	13%
	Fair	10	23%	5	23%	13	21%	6	33%	34	23%
	Good	15	35%	12	55%	25	40%	6	33%	58	40%
	Excellent	12	28%	3	14%	13	21%	4	22%	32	22%
	Not available/Not applicable/Don't know					1	2%	1	6%	2	1%

Table 173A

Rating of Secretarial Support – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of secretarial support	Poor			4	10%	16	13%	3	12%	23	11%
	Fair	7	39%	9	23%	33	28%	7	27%	56	28%
	Good	5	28%	15	38%	46	39%	11	42%	77	38%
	Excellent	4	22%	9	23%	15	13%	4	15%	32	16%
	Not available/Not applicable/Don't know	2	11%	2	5%	9	8%	1	4%	14	7%

Table 173B

Rating of Secretarial Support – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of secretarial support	Poor	14	33%	3	14%	15	24%	5	28%	37	26%
	Fair	9	21%	7	32%	12	19%	4	22%	32	22%
	Good	12	28%	11	50%	22	35%	6	33%	51	35%
	Excellent	8	19%	1	5%	11	18%	1	6%	21	14%
	Not available/Not applicable/Don't know					2	3%	2	11%	4	3%

Table 174A

Rating of Library Holdings – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of library holdings	Poor	2	11%	5	13%	17	14%			24	12%
	Fair	5	28%	10	26%	39	33%	11	42%	65	32%
	Good	9	50%	18	46%	49	41%	12	46%	88	44%
	Excellent	1	6%	3	8%	6	5%	2	8%	12	6%
	Not available/Not applicable/Don't know	1	6%	3	8%	8	7%	1	4%	13	6%

Table 174B

Rating of Library Holdings – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Rating of library holdings	Poor	5	12%	6	27%	16	26%	3	17%	30	21%
	Fair	13	30%	2	9%	18	29%	7	39%	40	28%
	Good	17	40%	12	55%	20	32%	5	28%	54	37%
	Excellent	5	12%			8	13%			13	9%
	Not available/Not applicable/Don't know	3	7%	2	9%			3	17%	8	6%

Table 175A

Satisfaction with Job Security – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with job security	Very dissatisfied	4	22%	4	10%	16	13%	3	12%	27	13%
	Somewhat dissatisfied	3	17%	4	10%	8	7%	2	8%	17	8%
	Somewhat satisfied	7	39%	14	36%	46	39%	11	42%	78	39%
	Very satisfied	4	22%	17	44%	49	41%	10	38%	80	40%

Table 175B

Satisfaction with Job Security – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with job security	Very dissatisfied			5	23%	1	2%	3	17%	9	6%
	Somewhat dissatisfied	5	12%			10	16%	1	6%	16	11%
	Somewhat satisfied	18	42%	8	36%	16	26%	5	28%	47	32%
	Very satisfied	20	47%	9	41%	35	56%	9	50%	73	50%

Table 176A

Satisfaction with Salary – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with salary	Very dissatisfied	3	17%	11	28%	25	21%	6	23%	45	22%
	Somewhat dissatisfied	9	50%	8	21%	35	29%	5	19%	57	28%
	Somewhat satisfied	5	28%	16	41%	50	42%	13	50%	84	42%
	Very satisfied	1	6%	4	10%	9	8%	2	8%	16	8%

Table 176B

Satisfaction with Salary – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with salary	Very dissatisfied	11	26%	2	9%	20	32%	7	39%	40	28%
	Somewhat dissatisfied	10	23%	11	50%	17	27%	6	33%	44	30%
	Somewhat satisfied	18	42%	6	27%	20	32%	5	28%	49	34%
	Very satisfied	4	9%	3	14%	5	8%			12	8%

Table 177A

Satisfaction with Benefits – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with benefits	Very dissatisfied			6	15%	12	10%	4	15%	22	11%
	Somewhat dissatisfied	4	22%	6	15%	23	19%	4	15%	37	18%
	Somewhat satisfied	9	50%	19	49%	57	48%	12	46%	97	48%
	Very satisfied	5	28%	8	21%	27	23%	6	23%	46	23%

Table 177B

Satisfaction with Benefits – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with benefits	Very dissatisfied	3	7%			9	15%	3	17%	15	10%
	Somewhat dissatisfied	6	14%	8	36%	9	15%	3	17%	26	18%
	Somewhat satisfied	23	53%	12	55%	34	55%	10	56%	79	54%
	Very satisfied	11	26%	2	9%	10	16%	2	11%	25	17%

Table 178A

Satisfaction with Spouse Employment Opportunities – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with spouse employment opportunity	Not applicable										
	Very dissatisfied	4	22%	5	13%	20	17%	3	12%	32	16%
	Somewhat dissatisfied	2	11%	6	15%	22	18%	6	23%	36	18%
	Somewhat satisfied	7	39%	17	44%	48	40%	9	35%	81	40%
	Very satisfied	5	28%	11	28%	29	24%	8	31%	53	26%

Table 178B

Satisfaction with Spouse Employment Opportunities – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Satisfaction with spouse employment opportunity	Not applicable	6	14%	5	23%	17	27%	4	22%	32	22%
	Very dissatisfied	5	12%	2	9%	5	8%	1	6%	13	9%
	Somewhat dissatisfied	3	7%	1	5%	5	8%	4	22%	13	9%
	Somewhat satisfied	14	33%	8	36%	24	39%	5	28%	51	35%
	Very satisfied	15	35%	6	27%	11	18%	4	22%	36	25%

Table 179A

Decision to Leave: How Important Salary Level? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: salary level?	Not important			2	5%	4	3%			6	3%
	Somewhat important	9	50%	18	46%	42	35%	13	50%	82	41%
	Very important	9	50%	19	49%	73	61%	13	50%	114	56%

Table 179B

Decision to Leave: How Important Salary Level? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: salary level?	Not important	3	7%			3	5%	2	11%	8	6%
	Somewhat important	18	42%	9	41%	23	37%	7	39%	57	39%
	Very important	22	51%	13	59%	36	58%	9	50%	80	55%

Table 180A

Decision to Leave: How Important Tenure? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: tenure?	Not important	1	6%	7	18%	21	18%	5	19%	34	17%
	Somewhat important	3	17%	13	33%	28	24%	9	35%	53	26%
	Very important	14	78%	19	49%	70	59%	12	46%	115	57%

Table 180B

Decision to Leave: How Important Tenure? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: tenure?	Not important	5	12%	4	18%	23	37%	3	17%	35	24%
	Somewhat important	12	28%	10	45%	8	13%	7	39%	37	26%
	Very important	26	60%	8	36%	31	50%	8	44%	73	50%

Table 181A

Decision to Leave: How Important Job Security? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: job security?	Not important			1	3%	6	5%	2	8%	9	4%
	Somewhat important	4	22%	14	36%	40	34%	5	19%	63	31%
	Very important	14	78%	24	62%	73	61%	19	73%	130	64%

Table 181B

Decision to Leave: How Important Job Security? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: job security?	Not important	2	5%			10	16%	1	6%	13	9%
	Somewhat important	13	30%	11	50%	18	29%	5	28%	47	32%
	Very important	28	65%	11	50%	34	55%	12	67%	85	59%

Table 182A

Decision to Leave: How Important Benefits? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: benefits?	Not important			4	10%	2	2%	1	4%	7	3%
	Somewhat important	9	50%	15	38%	39	33%	12	46%	75	37%
	Very important	9	50%	20	51%	78	66%	13	50%	120	59%

Table 182B

Decision to Leave: How Important Benefits? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: benefits?	Not important	2	5%			5	8%	1	6%	8	6%
	Somewhat important	11	26%	10	45%	17	27%	6	33%	44	30%
	Very important	30	70%	12	55%	40	65%	11	61%	93	64%

Table 183A

Decision to Leave: How Important Research Facilities? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: research facilities?	Not important			8	21%	13	11%	4	15%	25	12%
	Somewhat important	5	28%	10	26%	48	40%	12	46%	75	37%
	Very important	13	72%	21	54%	58	49%	10	38%	102	50%

Table 183B

Decision to Leave: How Important Research Facilities? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: research facilities?	Not important			2	9%	14	23%	6	33%	22	15%
	Somewhat important	18	42%	12	55%	21	34%	8	44%	59	41%
	Very important	25	58%	8	36%	27	44%	4	22%	64	44%

Table 184A

Decision to Leave: How Important Instructional Facilities? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: instructional facilities?	Not important			4	10%	5	4%			9	4%
	Somewhat important	7	39%	11	28%	38	32%	11	42%	67	33%
	Very important	11	61%	24	62%	76	64%	15	58%	126	62%

Table 184B

Decision to Leave: How Important Instructional Facilities? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: instructional facilities?	Not important					6	10%			6	4%
	Somewhat important	20	47%	9	41%	14	23%	5	28%	48	33%
	Very important	23	53%	13	59%	42	68%	13	72%	91	63%

Table 185A

Decision to Leave: How Important Employment Opportunities for Spouse? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: job for spouse?	Not applicable										
	Not important	3	17%	12	31%	25	21%	4	15%	44	22%
	Somewhat important	5	28%	12	31%	46	39%	10	38%	73	36%
	Very important	10	56%	15	38%	48	40%	12	46%	85	42%

Table 185B

Decision to Leave: How Important Employment Opportunities for Spouse? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: job for spouse?	Not applicable	6	14%	5	23%	12	19%	3	17%	26	18%
	Not important	9	21%	2	9%	11	18%	2	11%	24	17%
	Somewhat important	11	26%	4	18%	20	32%	8	44%	43	30%
	Very important	17	40%	11	50%	19	31%	5	28%	52	36%

Table 186A

Decision to Leave: How Important Geographic Location? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: geographic location?	Not important			4	10%	10	8%			14	7%
	Somewhat important	8	44%	9	23%	52	44%	11	42%	80	40%
	Very important	10	56%	26	67%	57	48%	15	58%	108	53%

Table 186B

Decision to Leave: How Important Geographic Location? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: geographic location?	Not important	1	2%	1	5%	4	6%	1	6%	7	5%
	Somewhat important	24	56%	6	27%	18	29%	7	39%	55	38%
	Very important	18	42%	15	68%	40	65%	10	56%	83	57%

Table 187A

Decision to Leave: How Important Good Schools for Children? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: schools for kids?	Not applicable										
	Not important	2	11%	19	49%	39	33%	7	27%	67	33%
	Somewhat important	2	11%	3	8%	24	20%	8	31%	37	18%
	Very important	14	78%	17	44%	56	47%	11	42%	98	49%

Table 187B

Decision to Leave: How Important Good Schools for Children? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How important: schools for kids?	Not applicable	12	28%	5	23%	22	35%	7	39%	46	32%
	Not important	10	23%	6	27%	20	32%	4	22%	40	28%
	Somewhat important	4	9%	5	23%	3	5%	1	6%	13	9%
	Very important	17	40%	6	27%	17	27%	6	33%	46	32%

Table 188A

Total Income from Institution - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Total income from institution	Less than \$20,000	2	11%	2	5%	6	5%			10	5%
	\$20,000 to 29,999	1	6%	3	8%	10	8%	8	31%	22	11%
	\$30,000 to 39,999	2	11%	5	13%	28	24%	9	35%	44	22%
	\$40,000 to 49,999	4	22%	9	23%	33	28%	4	15%	50	25%
	\$50,000 to 59,999	3	17%	10	26%	25	21%	4	15%	42	21%
	\$60,000 to \$69,999	4	22%	3	8%	11	9%	1	4%	19	9%
	\$70,000 to 79,999			6	15%	5	4%			11	5%
	\$80,000 to 89,999	1	6%							1	0%
	\$90,000 to 99,999	1	6%	1	3%					2	1%
	More than \$100,000					1	1%			1	0%

Table 188B

Total Income from Institution - Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Total income from institution	Less than \$20,000					2	3%			2	1%
	\$20,000 to 29,999	1	2%			4	6%			5	3%
	\$30,000 to 39,999	6	14%	5	23%	7	11%	4	22%	22	15%
	\$40,000 to 49,999	8	19%	2	9%	11	18%	4	22%	25	17%
	\$50,000 to 59,999	5	12%	4	18%	13	21%	4	22%	26	18%
	\$60,000 to \$69,999	2	5%	6	27%	9	15%	4	22%	21	14%
	\$70,000 to 79,999	7	16%	2	9%	9	15%	2	11%	20	14%
	\$80,000 to 89,999	5	12%			6	10%			11	8%
	\$90,000 to 99,999	2	5%	3	14%					5	3%
	More than \$100,000	7	16%			1	2%			8	6%

Table 189A

Total Personal Income, All Sources – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Total income all sources	Less than \$20,000	2	11%			5	4%			7	3%
	\$20,000 to 29,999	1	6%	5	13%	5	4%	8	31%	19	9%
	\$30,000 to 39,999	2	11%	5	13%	25	21%	6	23%	38	19%
	\$40,000 to 49,999	4	22%	7	18%	31	26%	7	27%	49	24%
	\$50,000 to 59,999	3	17%	8	21%	27	23%	4	15%	42	21%
	\$60,000 to \$69,999	4	22%	6	15%	16	13%			26	13%
	\$70,000 to 79,999			4	10%	4	3%	1	4%	9	4%
	\$80,000 to 89,999			2	5%	1	1%			3	1%
	\$90,000 to 99,999	2	11%	1	3%	2	2%			5	2%
	More than \$100,000			1	3%	3	3%			4	2%

Table 189B

Total Personal Income, All Sources – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Total income all sources	Less than \$20,000										
	\$20,000 to 29,999					1	2%			1	1%
	\$30,000 to 39,999	4	9%	3	14%	6	10%	4	22%	17	12%
	\$40,000 to 49,999	6	14%	1	5%	11	18%	2	11%	20	14%
	\$50,000 to 59,999	5	12%	3	14%	9	15%	4	22%	21	14%
	\$60,000 to \$69,999	2	5%	5	23%	9	15%	4	22%	20	14%
	\$70,000 to 79,999	8	19%	6	27%	11	18%	3	17%	28	19%
	\$80,000 to 89,999	5	12%	1	5%	8	13%			14	10%
	\$90,000 to 99,999	3	7%	2	9%	2	3%	1	6%	8	6%
	More than \$100,000	10	23%	1	5%	5	8%			16	11%

Table 190A

Total Household Income – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Total household income	Less than \$20,000	1	6%			3	3%			4	2%
	\$20,000 to 29,999	1	6%	3	8%	2	2%	2	8%	8	4%
	\$30,000 to 39,999	2	11%			9	8%	7	27%	18	9%
	\$40,000 to 49,999			2	5%	23	19%	1	4%	26	13%
	\$50,000 to 59,999	1	6%	7	18%	17	14%	3	12%	28	14%
	\$60,000 to \$69,999	6	33%	5	13%	18	15%	3	12%	32	16%
	\$70,000 to 79,999	4	22%	7	18%	26	22%	4	15%	41	20%
	\$80,000 to 89,999			2	5%	6	5%	1	4%	9	4%
	\$90,000 to 99,999	1	6%	4	10%	2	2%	1	4%	8	4%
	More than \$100,000	2	11%	9	23%	13	11%	4	15%	28	14%

Table 190B

Total Household Income – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Total household income	Less than \$20,000					2	3%	1	6%	3	2%
	\$20,000 to 29,999					1	2%			1	1%
	\$30,000 to 39,999	1	2%			1	2%	3	17%	5	3%
	\$40,000 to 49,999	2	5%	1	5%	2	3%	1	6%	6	4%
	\$50,000 to 59,999	3	7%	1	5%	5	8%	2	11%	11	8%
	\$60,000 to \$69,999	4	9%	1	5%	1	2%	1	6%	7	5%
	\$70,000 to 79,999	2	5%	3	14%	6	10%	2	11%	13	9%
	\$80,000 to 89,999	2	5%			7	11%	2	11%	11	8%
	\$90,000 to 99,999	4	9%	2	9%	6	10%			12	8%
	More than \$100,000	25	58%	14	64%	31	50%	6	33%	76	52%

Table 191A

Highest Degree Type – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Highest degree type	First-professional degree	1	6%			6	5%	1	4%	8	4%
	Doctoral degree	13	72%	28	72%	73	61%	8	31%	122	60%
	Master of Fine Arts, Master of Social Work										
	Other Master's degree	4	22%	11	28%	40	34%	16	62%	71	35%
	Bachelor's degree							1	4%	1	0%

Table 191B

Highest Degree Type – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Highest degree type	First-professional degree	1	2%	1	5%					2	1%
	Doctoral degree	31	72%	17	77%	38	61%	8	44%	94	65%
	Master of Fine Arts, Master of Social Work					1	2%			1	1%
	Other Master's degree	10	23%	4	18%	22	35%	10	56%	46	32%
	Bachelor's degree	1	2%			1	2%			2	1%

Table 192A

Field of Highest Degree – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Highest degree field	Business			1	3%	12	10%	2	8%	15	7%
	Education			3	8%	8	7%	4	15%	15	7%
	Engineering	2	11%	3	8%	7	6%			12	6%
	English & Literature					2	2%			2	1%
	Mathematics/Statistics										
	Physical Sciences			1	3%	6	5%			7	3%
	Parks & Recreation	1	6%	9	23%	20	17%	4	15%	34	17%
	Philosophy			1	3%	1	1%			2	1%
	Computer Science	2	11%	2	5%	8	7%	4	15%	16	8%
	Computer & Information Sciences	10	56%	15	38%	40	34%	7	27%	72	36%
	Computer Programming					4	3%			4	2%
	Systems Analysis	1	6%			1	1%			2	1%
	Other Computer Science			1	3%	5	4%	3	12%	9	4%
	Other	2	11%	3	8%	5	4%	2	8%	12	6%

Table 192B

Field of Highest Degree – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Highest degree field	Business	2	5%			11	18%	1	6%	14	10%
	Education	3	7%	2	9%	6	10%	3	17%	14	10%
	Engineering	7	16%	2	9%	2	3%			11	8%
	English & Literature	1	2%							1	1%
	Mathematics/Statistics			5	23%	13	21%	3	17%	21	14%
	Physical Sciences	1	2%			1	2%	1	6%	3	2%
	Parks & Recreation										
	Philosophy	1	2%			1	2%	1	6%	3	2%
	Computer Science										
	Computer & Information Sciences	18	42%	8	36%	16	26%	7	39%	49	34%
	Computer Programming	1	2%	1	5%	3	5%			5	3%
	Systems Analysis	1	2%			1	2%			2	1%
	Other Computer Science	3	7%	1	5%	6	10%	2	11%	12	8%
	Other	5	12%	3	14%	2	3%			10	7%

Table 193A
Gender – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Gender	Male	16	89%	27	69%	93	78%	15	58%	151	75%
	Female	2	11%	12	31%	26	22%	11	42%	51	25%

Table 193B
Gender – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Gender	Male	36	84%	15	68%	50	81%	12	67%	113	78%
	Female	7	16%	7	32%	12	19%	6	33%	32	22%

Table 194A
Age - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Age	Under 30					2	2%	1	4%	3	1%
	30-44	12	67%	16	41%	50	42%	11	42%	89	44%
	45-54	4	22%	18	46%	51	43%	11	42%	84	42%
	55-59	2	11%	4	10%	11	9%	1	4%	18	9%
	60-64			1	3%	3	3%	1	4%	5	2%
	65+					2	2%	1	4%	3	1%

Table 194B
Age - Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Age	Under 30	1	2%							1	1%
	30-44	16	37%	9	41%	20	32%	6	33%	51	35%
	45-54	14	33%	10	45%	21	34%	10	56%	55	38%
	55-59	6	14%	2	9%	9	15%	1	6%	18	12%
	60-64	4	9%	1	5%	8	13%			13	9%
	65+	2	5%			4	6%	1	6%	7	5%

Table 195A

Race / Ethnicity - Survey Year 1993

Race		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
American Indian or Alaska Native											
Asian and/or Pacific Islander	5	28%	4	10%	24	20%	2	8%	35	17%	
Black/African American non-Hispanic			1	3%	6	5%	3	12%	10	5%	
Hispanic	2	11%	2	5%	4	3%			8	4%	
White, non-Hispanic	11	61%	32	82%	85	71%	21	81%	149	74%	

Table 195B

Race / Ethnicity - Survey Year 1999

Race		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
American Indian or Alaska Native						1	2%			1	1%
Asian and/or Pacific Islander	11	26%	3	14%	9	15%			23	16%	
Black/African American non-Hispanic					5	8%			5	3%	
Hispanic			1	5%	2	3%	1	6%	4	3%	
White, non-Hispanic	32	74%	18	82%	45	73%	17	94%	112	77%	

Table 196A

Marital Status - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Marital status	Single, never married	2	11%	5	13%	13	11%	5	19%	25	12%
	Married	15	83%	30	77%	94	79%	17	65%	156	77%
	Living with someone in a marriage-like relationship										
	Separated, divorced, or widowed	1	6%	4	10%	12	10%	4	15%	21	10%

Table 196B

Marital Status - Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Marital status	Single, never married	6	14%	3	14%	7	11%	4	22%	20	14%
	Married	36	84%	17	77%	51	82%	13	72%	117	81%
	Living with someone in a marriage-like relationship			1	5%	1	2%			2	1%
	Separated, divorced, or widowed	1	2%	1	5%	3	5%	1	6%	6	4%

Table 197

Spouse Employed in Higher Education - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Spouse/sig other emp in higher ed	Not applicable	7	16%	3	14%	9	15%	5	28%	24	17%
	Yes, at this institution	4	9%	5	23%	4	6%	1	6%	14	10%
	Yes, at another higher education institution	2	5%	1	5%	6	10%	1	6%	10	7%
	No	30	70%	13	59%	43	69%	11	61%	97	67%

Table 198A

Country of Birth - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Country of birth	USA	10	56%	29	74%	81	68%	23	88%	143	71%
	Other	8	44%	10	26%	38	32%	3	12%	59	29%

Table 198B

Country of Birth – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Country of birth	USA	30	70%	15	68%	48	77%	16	89%	109	75%
	Other	13	30%	7	32%	14	23%	2	11%	36	25%

Table 199A

Citizenship Status – Survey Year 1993

Citizenship status		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
	United States citizen, native	11	61%	30	77%	85	71%	23	88%	149	74%
	United States citizen, naturalized	2	11%	1	3%	10	8%	1	4%	14	7%
	Permanent resident of the United States (immigrant visa)	3	17%	7	18%	21	18%	2	8%	33	16%
	Temporary resident of United States (non-immigrant visa)	2	11%	1	3%	3	3%			6	3%

Table 199B
Citizenship Status - Survey Year 1999

Citizenship status		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
United States citizen, native		30	70%	15	68%	46	74%	16	89%	107	74%
United States citizen, naturalized		7	16%	1	5%	7	11%	2	11%	17	12%
Permanent resident of the United States (immigrant visa)		4	9%	6	27%	6	10%			16	11%
Temporary resident of United States (non-immigrant visa)		2	5%			3	5%			5	3%

Table 200A

How Likely a Part-time Job at Another Postsecondary Institution? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Accept P/T job at another postsec. inst. in 3 yr	Not at all likely	18	100%	34	87%	100	84%	21	81%	173	86%
	Somewhat likely			2	5%	15	13%	4	15%	21	10%
	Very likely			3	8%	4	3%	1	4%	8	4%

Table 200B

How Likely a Part-time Job at Another Postsecondary Institution? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Accept P/T job at another postsec. inst. in 3 yr	Not at all likely	37	86%	19	86%	52	84%	18	100%	126	87%
	Somewhat likely	3	7%	2	9%	8	13%			13	9%
	Very likely	3	7%	1	5%	2	3%			6	4%

Table 201A

How Likely a Full-time Job at Another Postsecondary Institution? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Accept F/T job at another postsec. inst. in 3 yr	Not at all likely	7	39%	23	59%	59	50%	15	58%	104	51%
	Somewhat likely	8	44%	12	31%	42	35%	8	31%	70	35%
	Very likely	3	17%	4	10%	18	15%	3	12%	28	14%

Table 201B

How Likely a Full-time Job at Another Postsecondary Institution? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Accept F/T job at another postsec. inst. in 3 yr	Not at all likely	24	56%	14	64%	40	65%	9	50%	87	60%
	Somewhat likely	15	35%	4	18%	15	24%	7	39%	41	28%
	Very likely	4	9%	4	18%	7	11%	2	11%	17	12%

Table 202A

How Likely a Part-time Job, Not at a Postsecondary Institution? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Accept P/T job, not postsec., in 3 yr	Not at all likely	17	94%	33	85%	102	86%	24	92%	176	87%
	Somewhat likely	1	6%	4	10%	12	10%	1	4%	18	9%
	Very likely			2	5%	5	4%	1	4%	8	4%

Table 202B

How Likely a Part-time Job, Not at a Postsecondary Institution? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Accept P/T job, not postsec., in 3 yr	Not at all likely	38	88%	14	64%	49	79%	15	83%	116	80%
	Somewhat likely	3	7%	8	36%	9	15%	3	17%	23	16%
	Very likely	2	5%			4	6%			6	4%

Table 203A

How Likely a Full-time Job, Not at a Postsecondary Institution? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Accept F/T job, not postsec., in 3 yr	Not at all likely	9	50%	26	67%	83	70%	15	58%	133	66%
	Somewhat likely	7	39%	9	23%	26	22%	8	31%	50	25%
	Very likely	2	11%	4	10%	10	8%	3	12%	19	9%

Table 203B

How Likely a Full-time Job, Not at a Postsecondary Institution? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Accept F/T job, not postsec., in 3 yr	Not at all likely	31	72%	14	64%	40	65%	12	67%	97	67%
	Somewhat likely	9	21%	5	23%	14	23%	5	28%	33	23%
	Very likely	3	7%	3	14%	8	13%	1	6%	15	10%

Table 204A

How Likely to Retire in Next Three Years? - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How likely retire in 3 years	Not at all likely	18	100%	35	90%	104	87%	24	92%	181	90%
	Somewhat likely			4	10%	11	9%	1	4%	16	8%
	Very likely					4	3%	1	4%	5	2%

Table 204B

How Likely to Retire in Next Three Years? - Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
How likely retire in 3 years	Not at all likely	38	88%	20	91%	48	77%	18	100%	124	86%
	Somewhat likely	3	7%	2	9%	8	13%			13	9%
	Very likely	2	5%			6	10%			8	6%

Table 205A

Age Most Likely to Stop Working at Postsecondary Institution – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Age most likely to stop working at postsecondary institution	Don't know	6	33%	14	36%	36	30%	6	23%	62	31%
	Before age 55			2	5%	2	2%	3	12%	7	3%
	Age 55-59					9	8%	1	4%	10	5%
	Age 60-64	4	22%	6	15%	17	14%	3	12%	30	15%
	Age 65-69	4	22%	9	23%	36	30%	7	27%	56	28%
	Age 70-74	2	11%	6	15%	17	14%	6	23%	31	15%
	Age 75-79	2	11%			1	1%			3	1%
	Age 80 or later			2	5%	1	1%			3	1%

Table 205B

Age Most Likely to Stop Working at Postsecondary Institution – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Age most likely to stop working at postsecondary institution	Don't know	7	16%	6	27%	11	18%	5	28%	29	20%
	Before age 55										
	Age 55-59	4	9%	6	27%	4	6%	2	11%	16	11%
	Age 60-64	11	26%	2	9%	13	21%			26	18%
	Age 65-69	14	33%	4	18%	22	35%	8	44%	48	33%
	Age 70-74	7	16%	3	14%	10	16%	2	11%	22	15%
	Age 75-79			1	5%					1	1%
	Age 80 or later					2	3%	1	6%	3	2%

Table 206A

Retire and Work Part-time at Current Institution? – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Retire and work	Don't know	3	17%	10	26%	35	29%	9	35%	57	28%
P/T at institution	Yes	10	56%	19	49%	51	43%	11	42%	91	45%
	No	5	28%	10	26%	33	28%	6	23%	54	27%

Table 206B

Retire and Work Part-time at Current Institution? – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Retire and work	Don't know	8	19%	5	23%	16	26%	6	33%	35	24%
P/T at institution	Yes	23	53%	9	41%	25	40%	7	39%	64	44%
	No	12	28%	8	36%	21	34%	5	28%	46	32%

Table 207

Retired from Another Position – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Have you retired from	Yes	1	2%			3	5%	2	11%	6	4%
another position	No	42	98%	22	100%	59	95%	16	89%	139	96%

Table 208A

Would You Take Early Retirement? - Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Would you take early retirement	Don't know	6	33%	17	44%	44	37%	10	38%	77	38%
	Yes	3	17%	12	31%	29	24%	6	23%	50	25%
	No	9	50%	10	26%	46	39%	10	38%	75	37%

Table 208B

Would You Take Early Retirement? - Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Would you take early retirement	Don't know	16	37%	3	14%	23	37%	9	50%	51	35%
	Yes	15	35%	8	36%	21	34%	3	17%	47	32%
	No	12	28%	11	50%	18	29%	6	33%	47	32%

Table 209A

Age Likely to Retire from All Paid Employment – Survey Year 1993

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Age likely to retire from all paid employment	Don't know	6	33%	14	36%	41	34%	6	23%	67	33%
	Before age 60			1	3%	6	5%	1	4%	8	4%
	Age 60-64	4	22%	3	8%	15	13%	3	12%	25	12%
	Age 65-69	3	17%	10	26%	29	24%	8	31%	50	25%
	Age 70-74	3	17%	9	23%	22	18%	7	27%	41	20%
	Age 75-79	1	6%	2	5%	3	3%	1	4%	7	3%
	Age 80 or later	1	6%			3	3%			4	2%

Table 209B

Age Likely to Retire from All Paid Employment – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Age likely to retire from all paid employment	Don't know	6	14%	8	36%	8	13%	6	33%	28	19%
	Before age 60	2	5%	2	9%	2	3%	3	17%	9	6%
	Age 60-64	9	21%	3	14%	13	21%			25	17%
	Age 65-69	18	42%	4	18%	21	34%	7	39%	50	34%
	Age 70-74	6	14%	3	14%	12	19%	2	11%	23	16%
	Age 75-79	2	5%	1	5%	2	3%			5	3%
	Age 80 or later			1	5%	4	6%			5	3%

Table 210

Decision to Leave: Most Important Factor – Survey Year 1999

		Institutional type								Total	
		Research		Doctoral		Comprehensive		Liberal Arts		Count	Col %
		Count	Col %	Count	Col %	Count	Col %	Count	Col %		
If leave, most important factor	Salary level	15	35%	7	32%	25	40%	7	39%	54	37%
	Tenure-track or tenured position	1	2%	1	5%	5	8%			7	5%
	Job security	3	7%			5	8%	2	11%	10	7%
	Opportunities for advancement			3	14%	1	2%	1	6%	5	3%
	Benefits							1	6%	1	1%
	No pressure to publish	2	5%			2	3%	1	6%	5	3%
	Good research facilities and equipment	2	5%	2	9%	3	5%	1	6%	8	6%
	Good instructional facilities and equipment					4	6%	3	17%	7	5%
	Good job or job opportunities for your spouse or partner	5	12%			3	5%	1	6%	9	6%
	Good geographic location	3	7%	2	9%	4	6%			9	6%
	Good environment or schools for your children					1	2%			1	1%
	Greater opportunity to teach	3	7%			1	2%			4	3%
	Greater opportunity to do research	9	21%	7	32%	5	8%	1	6%	22	15%
	None					3	5%			3	2%

Type of Institution

In order to answer the research question, “Are there differences in the reported working conditions experienced by computer science faculty members at research universities and doctorate-granting universities when compared with those of faculty at other four-year institutions?,” the computer science faculty responses were sorted according to the Carnegie classification of the institution where they taught. The literature which generated this research question suggested that there could be significant differences between “elite” institutions (which the literature suggested were Research I, Research II, Doctoral I, and Doctoral II institutions) and other institutions which offered four-year undergraduate programs (Carnegie classifications Comprehensive I, Comprehensive II, Liberal Arts I, and Liberal Arts II). The most efficient way to analyze the data for this research question, then, was to divide the responses into two groups—those from faculty at research or doctoral institutions and those from faculty at comprehensive or liberal arts institutions.

Before such a grouping could be made, however, it was necessary to run a preliminary analysis of the data from the research and doctoral institutions. If significant differences existed in the faculty responses from these two types of institutions, it would be improper to group them together. An independent samples t-test was therefore run for each of the questions, comparing the means from the research institutions with those from the doctoral institutions. The results of these means comparisons are summarized in Appendix E, Tables E.1, E.2, and E.3. The independent t-tests revealed seven statistically significant differences between the two sets of responses. As could be expected, the questions that did show a significant difference in means (i.e., $p < 0.05$) were primarily clustered in the areas of salary, hours, and tenure:

- Question 30A Hours per week spent in paid activities at your institution
- Question 32A1 Number of undergraduate committees served on
- Question 69B How important is tenure?
- Question 69G How important are research facilities?
- Question 75 Total income from institution
- Question 76 Total personal income, all sources
- Question 81 Gender

(In regard to questions 75 and 76, it is interesting to note that no statistically significant difference in means was shown for the subsequent question 79, "Total household income"; apparently the faculty at the doctoral institutions make up for the lag in their personal income by having a working spouse contributing to the total household income.) Another question which showed a statistically significant difference in means, Question 81 ("Gender"), was also predictable; given the dearth of women in the profession, one would expect to find fewer women in the most elite positions, which are highly sought.

Because the number of statistically significant differences were few between the faculty responses from research institutions and doctoral institutions, it was deemed appropriate to group these responses together, for comparison to the faculty responses from the "other" institutions. The few questions which did show statistically significant differences were flagged, so that in the final analysis of the data they could be considered in a different manner.

With the data divided into two groups, "Research or Doctoral" and "Comprehensive or Liberal Arts," an independent samples t-test was run for each question. For each t-test, two tables were created to show the results. For the question, "Hours Per Week Paid Activities at Institution," for example, Table E.4a shows the means and standard deviations of the two groups being compared. Table E.4b shows the results of the Levene's test for equality of variances and the t-test; on this table, the second row shows a p value of .049, indicating that the result of the Levene's test was non-significance (i.e., $p < 0.05$), which means that the numbers in the column labeled "Equal variances assumed" were used; moving on down that column to the row labeled "Sig. (2-tailed)," the table shows that the p value produced by the t-test was .006, indicating a statistically significant difference.

The test results revealed statistically significant differences on 29 of the 95 questions analyzed. Table 211 lists the questions that elicited responses from the two groups which were statistically significantly different. Results for each test are detailed in Appendix E; the tables there correspond to the following questions, grouped under the headings "Intrinsic factors," "Extrinsic factors," and "Demographic factors."

Table 211
Significant Differences in Means. Comparisons by Type of Institution

Question	Label	t-test for equality of means: sig. (two-tailed)	Difference in means
Q30A	Hours week paid activities at institution	.000	-4.87
Q31A1	Time actually spent teaching	.008	-6.11
Q31A3	Time actually spent at research	.000	10.24
Q31A4	Time actually spent on professional growth	.003	-2.31
Q31A7	Time actually spent on consulting	.039	-1.92
Q31B1	Time preferred at teaching	.004	-6.66
Q31B3	Time preferred at research	.000	10.62
Q31B4	Time preferred on professional growth	.003	-2.71
Q31B7	Time preferred on consulting	.007	-2.21
Q32A2	Nbr. graduate committees served on	.006	2.67
Q32B2	Nbr. graduate committees chaired	.012	1.13
Q33	Total classes taught	.000	-1.11
Q34	Total courses taught	.000	-0.74
Q51	Total office hours/week	.012	-1.61
Q52	Any creative work writing research	.000	-0.20
Q54	Any funded research	.000	-0.81
Q55	PI or Co-PI on grants or contracts	.000	-1.10
Q61A	Funds for tuition remission	.006	-0.11
Q65G	Satis w quality of grad students	.000	2.52
Q66D	Satis w time to keep current in field	.013	0.25
Q69F	How important: no publishing pressure	.000	-0.32
Q60A	Rating of research equip. instruments	.009	0.36
Q60D	Rating of avail. of research assistants	.025	-0.39
Q60F	Rating of centralized computer facilities	.000	0.51
Q60G	Rating of Internet connections	.018	0.28
Q69G	How important: research facilities	.015	0.19
Q75	Total income from institution	.000	1.01
Q76	Total personal income, all sources	.000	0.98
Q79	Total household income	.000	1.14

Intrinsic Factors

- How many hours per week did you spend on paid activity at your institution? (Tables E.4a, E.4b)
- How many hours per week did you spend on unpaid activity at your institution? (Tables E.5a, E.5b)
- How many hours per week did you spend on paid activity outside your institution? (Tables E.6a, E.6b)
- How many hours per week did you spend on unpaid activity outside your institution? (Tables E.7a, E.7b)
- What percent of your time do you spend . . .
 - teaching? (Tables E.8a, E.8b)
 - in research/scholarship activities? (Tables E.9a, E.9b)
 - in professional growth activities? (Tables E.10a, E.10b)
 - in administration? (Tables E.11a, E.11b)
 - on service activities? (Tables E.12a, E.12b)
 - on consulting? (Tables E.13a, E.13b)
- What percent of your time would you prefer to spend . . .
 - teaching? (Tables E.14a, E.14b)
 - in research/scholarship activities? (Tables E.15a, E.15b)
 - in professional growth activities? (Tables E.16a, E.16b)
 - in administration? (Tables E.17a, E.17b)
 - on service activities? (Tables E.18a, E.18b)
 - on consulting? (Tables E.19a, E.19b)
- How many undergraduate committees did you serve on during the fall term? (Tables E.20a, E.20b)
- How many graduate committees did you serve on during the fall term? (Tables E.21a, E.21b)
- How many undergraduate committees did you chair during the fall term? (Tables E.22a, E.22b)
- How many graduate committees did you chair during the fall term? (Tables E.23a, E.23b)
- How many classes or sections did you teach during the fall term? (Tables E.24a, E.24b)

- How many different courses did you teach during the fall term? (Tables E.25a, E.25b)
- How many of the classes you taught in the fall were remedial? (Tables E.26a, E.26b)
- How many of the classes you taught in the fall were continuing education? (Tables E.27a, E.27b)
- How many scheduled office hours did you have per week? (Tables E.28a, E.28b)
- Were you engaged in any professional research, proposal writing, creative writing, or creative works during the fall term? (Tables E.29a, E.29b)
- During this term, were you engaged in any funded research or funded creative work? (Tables E.30a, E.30b)
- During this term, were you a principal investigator or co-principal investigator for any grants or contracts? (Tables E.31a, E.31b)
- During the past two years, did you use institutional funds for . . .
 - tuition remission? (Tables E.32a, E.32b)
 - professional association memberships or registration fees? (Tables E.33a, E.33b)
 - professional travel? (Tables E.34a, E.34b)
 - training to improve research or teaching skills? (Tables E.35a, E.35b)
 - sabbatical leave? (Tables E.36a, E.36b)
- How satisfied are you with . . .
 - the authority you have to make decisions about the content of your courses? (Tables E.37a, E.37b)
 - the authority you have to decide what courses you will teach? (Tables E.38a, E.38b)
 - the authority you have to make other job decisions? (Tables E.39a, E.39b)
 - the time you have available to advise students? (Tables E.40a, E.40b)
 - the quality of the undergraduate students whom you have taught? (Tables E.41a, E.41b)
 - the quality of the graduate students whom you have taught? (Tables E.42a, E.42b)
 - your workload? (Tables E.43a, E.43b)
 - opportunities for advancement in rank at your institution? (Tables E.44a, E.44b)
 - time available for keeping current in your field? (Tables E.45a, E.45b)
 - freedom to do outside consulting? (Tables E.46a, E.46b)
 - your job overall? (Tables E.47a, E.47b)

- If you were to leave your current position to accept another position inside or outside of academia, how important would these factors be in your decision?
 - opportunities for advancement (Tables E.48a, E.48b)
 - no pressure to publish (Tables E.49a, E.49b)
 - greater opportunity to teach (Tables E.50a, E.50b)
 - greater opportunity to do research (Tables E.51a, E.51b)

Extrinsic Factors

- What is your academic rank, title, or position? (Tables E.52a, E.52b)
- How long have you held your current job? (Tables E.53a, E.53b)
- How many years have you been teaching in higher education institutions? (Tables E.54a, E.54b)
- Do you do outside consulting in addition to your employment at this institution? (Tables E.55a, E.55b)
- How many different jobs, other than your employment at this institution or consulting jobs, did you have this term? (Tables E.56a, E.56b)
- How satisfied are you with . . .
 - basic research equipment or instruments? (Tables E.57a, E.57b)
 - laboratory or research space and supplies? (Tables E.58a, E.58b)
 - availability of research assistants? (Tables E.59a, E.59b)
 - personal computers and local networks? (Tables E.60a, E.60b)
 - centralized (main frame) computer facilities? (Tables E.61a, E.61b)
 - Internet connections? (Tables E.62a, E.62b)
 - audio-visual equipment? (Tables E.63a, E.63b)
 - classroom space? (Tables E.64a, E.64b)
 - office space? (Tables E.65a, E.65b)
 - secretarial support? (Tables E.66a, E.66b)
 - library holdings? (Tables E.67a, E.67b)
- How satisfied are you with . . .
 - your job security? (Tables E.68a, E.68b)
 - your salary? (Tables E.69a, E.69b)
 - your benefits, generally? (Tables E.70a, E.70b)
 - employment opportunities for your spouse? (Tables E.71a, E.71b)
- If you were to leave your current position to accept another position inside or outside of academia, how important would these factors be in your decision?

salary level (Tables E.72a, E.72b)
 tenure-track or tenured position (Tables E.73a, E.73b)
 job security (Tables E.74a, E.74b)
 benefits (Tables E.75a, E.75b)
 good research facilities and equipment (Tables E.76a, E.76b)
 good instructional facilities and equipment (Tables E.77a, E.77b)
 good job opportunities for your spouse or partner (Tables E.78a, E.78b)
 good geographic location (Tables E.79a, E.79b)
 good environment or schools for your children (Tables E.80a, E.80b)

- What is your total income that you earn from your institution? (Tables E.81a, E.81b)
- What is your total personal income from all sources? (Tables E.82a, E.82b)
- What is your total household income? (Tables E.83a, E.83b)

Demographic Factors

- Are you male or female? (Tables E.84a, E.84b)
- What is your age? (Tables E.85a, E.85b)
- Is your spouse employed in higher education? (Tables E.86a, E.86b)
- In what country were you born? (Tables E.87a, E.87b)
- What is your citizenship status? (Tables E.88a, E.88b)
- How likely are you to accept a part-time job at another postsecondary institution in the next three years? (Tables E.89a, E.89b)
- How likely are you to accept a full-time job at another postsecondary institution in the next three years? (Tables E.90a, E.90b)
- How likely are you to accept a part-time job somewhere other than a postsecondary institution in the next three years? (Tables E.91a, E.91b)
- How likely are you to accept a full-time job somewhere other than a postsecondary institution in the next three years? (Tables E.92a, E.92b)
- How likely are you to retire in the next three years? (Tables E.93a, E.93b)
- At what age do you think you are most likely to stop working at a postsecondary institution? (Tables E.94a, E.94b)

- If you could elect to draw on your retirement and still work at this institution on a part-time basis, would you do so? (Tables E.95a, E.95b)
- Have you retired from another position? (Tables E.96a, E.96b)
- If an early retirement option were offered to you at this institution, would you take it? (Tables E.97a, E.97b)
- At what age do you think you are most likely to retire from all paid employment? (Tables E.98a, E.98b)

Year of Survey

In order to answer the research question, “Were the working conditions reported by computer science faculty members in NSOPF:93 different from those reported by computer science faculty members in NSOPF:99?”, the computer science faculty responses were sorted according to the year of the survey through which they were gathered. An independent samples t-test was then run for each question that appeared on both surveys, to determine if there were statistically significant differences between the 1993 responses and the 1999 responses. The test results revealed statistically significant differences on 27 of the 89 questions analyzed. Table 212 lists the questions that elicited responses from the two groups which were statistically significantly different. Results for each test are detailed in Appendix F; the tables there correspond to the following questions, grouped under the headings “Intrinsic factors,” “Extrinsic factors,” and “Demographic factors.”

Intrinsic Factors

- How many hours per week did you spend on paid activity at your institution? (Tables F.1a, F.1b)
- How many hours per week did you spend on unpaid activity at your institution? (Tables F.2a, F.2b)
- How many hours per week did you spend on paid activity outside your institution? (Tables F.3a, F.3b)
- How many hours per week did you spend on unpaid activity outside your institution? (Tables F.4a, F.4b)

Table 212
Significant Differences in Means, Comparisons by Year of Survey

Question	Label	t-test for equality of means: sig. (two-tailed)	Difference in means
Q30A	Hours/week paid activities at institution	.000	-4.87
Q30B	Hours/week unpaid activities at institution	.000	2.51
Q61C	Funds for professional travel	.008	0.14
Q61D	Funds improving teaching, research	.007	0.12
Q65A	Satis w authority to decide course content	.005	-0.36
Q65B	Satis w authority to decide courses taught	.003	-0.44
Q65C	Satis w authority to make other decisions	.002	-0.51
Q65D	Satis w time available to advise students	.036	-0.31
Q66A	Satis w work load	.007	0.27
Q66J	Satis w job overall	.030	0.18
Q7	Years in current job	.004	-2.72
Q20-21	Employed only at institution	.000	-0.34
Q22	Nbr of positions outside institution	.000	1.11
Q60A	Rating of research equip. instruments	.024	0.32
Q60B	Rating of lab space and supplies	.002	0.43
Q60I	Rating of audio-visual equipment	.023	0.24
Q60J	Rating of classroom space	.000	0.46
Q60K	Rating of office space	.020	0.24
Q60M	Rating of secretarial support	.006	0.32
Q66B	Satis w job security	.033	-0.22
Q66I	Satis w spouse job opportunities	.000	1.55
Q69I	How important: spouse job opportunities	.000	1.27
Q69K	How important: good schools for children	.000	2.33
Q75	Total income from institution	.000	-1.35
Q76	Total personal income, all sources	.000	-1.77
Q79	Total household income	.000	-2.15
Q82	Age	.001	-0.37

- What percent of your time do you spend . . .
 - teaching? (Tables F.5a, F.5b)
 - in research/scholarship activities? (Tables F.6a, F.6b)
 - in professional growth activities? (Tables F.7a, F.7b)
 - in administration? (Tables F.8a, F.8b)
 - on service activities? (Tables F.9a, F.9b)
 - on consulting? (Tables F.10a, F.10b)

- What percent of your time would you prefer to spend . . .
 - teaching? (Tables F.11a, F.11b)
 - in research/scholarship activities? (Tables F.12a, F.12b)
 - in professional growth activities? (Tables F.13a, F.13b)
 - in administration? (Tables F.14a, F.14b)
 - on service activities? (Tables F.15a, F.15b)
 - on consulting? (Tables F.16a, F.16b)

- How many undergraduate committees did you serve on during the fall term? (Tables F.17a, F.17b)

- How many graduate committees did you serve on during the fall term? (Tables F.18a, F.18b)

- How many undergraduate committees did you chair during the fall term? (Tables F.19a, F.19b)

- How many graduate committees did you chair during the fall term? (Tables F.20a, F.20b)

- How many classes or sections did you teach during the fall term? (Tables F.21a, F.21b)

- How many scheduled office hours did you have per week? (Tables F.22a, F.22b)

- Were you engaged in any professional research, proposal writing, creative writing, or creative works during the fall term? (Tables F.23a, F.23b)

- During this term, were you engaged in any funded research or funded creative work? (Tables F.24a, F.24b)

- During this term, were you a principal investigator or co-principal investigator for any grants or contracts? (Tables F.25a, F.25b)

- During the past two years, did you use institutional funds for . . .
 - tuition remission? (Tables F.26a, F.26b)

professional association memberships or registration fees? (Tables F.27a, F.27b)
 professional travel? (Tables F.28a, F.28b)
 training to improve research or teaching skills? (Tables F.29a, F.29b)
 sabbatical leave? (Tables F.30a, F.30b)

- How satisfied are you with . . .
 - the authority you have to make decisions about the content of your courses? (Tables F.31a, F.31b)
 - the authority you have to decide what courses you will teach? (Tables F.32a, F.32b)
 - the authority you have to make other job decisions? (Tables F.33a, F.33b)
 - the time you have available to advise students? (Tables F.34a, F.34b)
 - the quality of the undergraduate students whom you have taught? (Tables F.35a, F.35b)
 - the quality of graduate students whom you have taught? (Tables F.36a, F.36b)
 - your workload? (Tables F.37a, F.37b)
 - opportunities for advancement in rank at your institution? (Tables F.38a, F.38b)
 - time available for keeping current in your field? (Tables F.39a, F.39b)
 - freedom to do outside consulting? (Tables F.40a, F.40b)
 - your job overall? (Tables F.41a, F.41b)
- If you were to leave your current position to accept another position inside or outside of academia, how important would these factors be in your decision?
 - opportunities for advancement (Tables F.42a, F.42b)
 - no pressure to publish (Tables F.43a, F.43b)
 - greater opportunity to teach (Tables F.44a, F.44b)
 - greater opportunity to do research (Tables F.45a, F.45b)

Extrinsic Factors

- What is your academic rank, title, or position? (Tables F.46a, F.46b)
- How long have you held your current job? (Tables F.47a, F.47b)
- Do you do outside consulting in addition to your employment at this institution? (Tables F.48a, F.48b)
- How many different jobs, other than your employment at this institution or consulting jobs, did you have this term? (Tables F.49a, F.49b)
- How satisfied are you with . . .
 - basic research equipment or instruments? (Tables F.50a, F.50b)
 - laboratory or research space and supplies? (Tables F.51a, F.51b)

- availability of research assistants? (Tables F.52a, F.52b)
 - personal computers and local networks? (Tables F.53a, F.53b)
 - centralized (main frame) computer facilities? (Tables F.54a, F.54b)
 - Internet connections? (Tables F.55a, F.55b)
 - audio-visual equipment? (Tables F.56a, F.56b)
 - classroom space? (Tables F.57a, F.57b)
 - office space? (Tables F.58a, F.58b)
 - secretarial support? (Tables F.59a, F.59b)
 - library holdings? (Tables F.60a, F.60b)
- How satisfied are you with . . .
 - your job security? (Tables F.61a, F.61b)
 - your salary? (Tables F.62a, F.62b)
 - your benefits, generally? (Tables F.63a, F.63b)
 - employment opportunities for your spouse? (Tables F.64a, F.64b)
 - If you were to leave your current position to accept another position inside or outside of academia, how important would these factors be in your decision?
 - salary level (Tables F.65a, F.65b)
 - tenure-track or tenured position (Tables F.66a, F.66b)
 - job security (Tables F.67a, F.67b)
 - benefits (Tables F.68a, F.68b)
 - good research facilities and equipment (Tables F.69a, F.69b)
 - good instructional facilities and equipment (Tables F.70a, F.70b)
 - good job opportunities for your spouse or partner (Tables F.71a, F.71b)
 - good geographic location (Tables F.72a, F.72b)
 - good environment or schools for your children (Tables F.73a., F.73b)
 - What is your total income that you earn from your institution? (Tables F.74a, F.74b)
 - What is your total personal income from all sources? (Tables F.75a, F.75b)
 - What is your total household income? (Tables F.76a, F.76b)

Demographic Factors

- Are you male or female? (Tables F.77a, F.77b)
- What is your age? (Tables F.78a, F.78b)
- In what country were you born? (Tables F.79a, F.79b)
- What is your citizenship status ? (Tables F.80a, F.80b)

- How likely are you to accept a part-time job at another postsecondary institution in the next three years? (Tables F.81a, F.81b)
- How likely are you to accept a full-time job at another postsecondary institution in the next three years? (Tables F.82a, F.82b)
- How likely are you to accept a part-time job somewhere other than a postsecondary institution in the next three years? (Tables F.83a, F.83b)
- How likely are you to accept a full-time job somewhere other than a postsecondary institution in the next three years? (Tables F.84a, F.84b)
- How likely are you to retire in the next three years? (Tables F.85a, F.85b)
- At what age do you think you are most likely to stop working at a postsecondary institution? (Tables F.86a, F.86b)
- If you could elect to draw on your retirement and still work at this institution on a part-time basis, would you do so? (Tables F.87a, F.87b)
- If an early retirement option were offered to you at this institution, would you take it? (Tables F.88a, F.88b)
- At what age do you think you are most likely to retire from all paid employment? (Tables F.89a, F.89b)

Summary

Data from the National Study of Postsecondary Faculty 1993 and National Study of Postsecondary Faculty 1999 were filtered and analyzed in an effort to answer the five research questions of this study. The responses given by computer science faculty members to specific questions were tabulated as a group; on each question where responses were offered on an interval scale, means and standard deviations were calculated. The resulting frequency tables provided a broad summary of the responses to questions about intrinsic and extrinsic factors experienced by computer science faculty, as well as information about the demographic profile of this group. To provide more detailed information, the data were then cross-tabulated for each question, to show response frequencies when subdivided by type of institution and year of survey.

Research questions about differences in subgroups were addressed by sorting the responses according to date of survey and the Carnegie classification of the faculty member's institution; various responses of these subgroups were then paired and tested for differences in means, using an independent samples t-test. The results of these tests provided information on whether there were statistically significant differences in the responses of faculty at different types of institutions, and whether responses to NSOPF:93 differed from the NSOPF:99 responses to a degree of statistical significance.

These analyses revealed interesting and useful information about computer science faculty. The faculty members reported that they work, on average, a 45-hour work week, with the majority of their time spent on teaching activities. Though faculty members said they would like to have more time to devote to research and professional growth, they do have some time for those activities, and those who want to do consulting on the side seem to be able to do so. Most of the faculty said they taught three to five classes each semester, with an average of two to four different courses to prepare; the number of classes and course preparations tended to be lower at research and doctoral institutions, where research work was given more time, instead. The faculty also reported that they enjoy a high degree of autonomy and authority in their jobs and that many of their institutions supported their professional development activities through funds for travel, memberships in professional organizations, tuition remission, and sabbaticals.

Questions about extrinsic factors revealed that the faculty members found their work environment to be a stable and secure one. Most of the respondents said they held tenured or tenure-track positions, and the statistics on "number of jobs held" and "years in the profession" indicated that job changes in the profession were infrequent and that those who choose the profession tend to stay there. The respondents expressed general satisfaction with the quality of their work setting (offices, labs, classrooms, equipment). It was only in the area of salary that significant dissatisfactions were expressed. Though the reported salaries were higher on the 1999 survey than they were on the 1993 survey, the salary ranges reported lagged behind reported salaries for comparably trained professionals in industry by about \$10,000 a year.

The demographic data showed the group to be primarily young, white, and male. As would be expected the group was highly educated, though only half of the respondents had earned their highest degrees in computer science—a phenomenon to be expected in a discipline that is relatively new. Most of the respondents expressed general satisfaction with their careers and confidence that the salary and benefits earned thereby will allow them to retire comfortably at age 60 to 70.

When the faculty members were divided into subgroups by the type of institution where they taught, means comparisons revealed that the groups' answers were statistically significantly different on 29 of the 95 questions analyzed. As would be expected, faculty at research and doctorate-granting institutions did spend less time on teaching and more time on research than did their counterparts at comprehensive and liberal arts institutions, and their average income was higher than that of their counterparts. On the other hand, the two subgroups were similar in many ways: they both enjoyed pleasant work surroundings, a high degree of job stability, and a general sense of satisfaction about their work overall.

When responses from the 1993 NSOPF were compared to those from the 1999 survey, statistically significant differences could be seen on 27 out of 89 questions. The faculty members reported a slight increase in the average time spent on paid activities in the 1999 survey, and funds for travel and continuing education were not as readily available as those reported in the 1993 survey. These changes seemed to be balanced, though, by reports of higher compensation levels and greater satisfaction in 1999 with the levels of autonomy, authority, and security the faculty experienced in their work.

CHAPTER FIVE

Conclusions and Recommendations

Introduction

Faced with a steadily growing demand for computer science courses and a limited number of new computer science Ph.D.s choosing to teach, higher education administrators are finding they must look to business and industry to recruit qualified professionals for their computer science faculties. Current economic realities make it difficult for these administrators to meet or beat industry standards in the area of salary, but it is possible that other aspects of academic life could serve as strong selling points in the recruiting process—factors such as flexible working conditions, opportunities for research or travel, relative job security, tuition reimbursement, comfortable workloads, mentoring opportunities, and continuing advancement opportunities for older workers. Though the presence of these factors had not been previously documented or reviewed in an organized way, the data gathered through the National Study of Postsecondary Faculty in 1993 and 1999 offered the information needed to develop a profile of the working conditions of computer science faculty at four-year colleges and universities in the United States. Through analysis of the NSOPF data, this study produced findings that answered the five research questions below and suggested ways college and university administrators could use the information to their benefit as they work to recruit qualified personnel for the teaching of computer science.

Major Findings and Conclusions

Research Question 1: What is the nature of the intrinsic factors computer science faculty members experience working at four-year colleges and universities?

Time on the job. Computer science faculty at four-year colleges and universities reported that they devoted an average of 45 hours per week to paid activity at their institutions

(Table 3). Faculty at research institutions tended to report more time spent at work than did their counterparts at other institutions (Tables 107A and 107B); however, this extra time appears to be devoted to research, because their average hours spent teaching were actually less than those reported by faculty at other institutions (Tables 218A and 218B).

Time spent working at other activities was negligible in comparison to the respondents' paid work at their institutions. The respondents reported they worked an average of 3.62 hours a week doing unpaid activities at their institutions and an average of 2.64 hours per week doing paid activities for other employers (Tables 4 and 5); at the same time, 54 percent of the respondents said they did no unpaid activity at their institutions, and 72 percent reported that they had done no work for an outside employer during that year. Just over 16 percent of the respondents said that they worked an average of 1 to 8 hours per week for outside pay, which left only 11 percent who worked 10 or more hours a week for a second employer. The group reported very little time spent on unpaid outside work: 66.9 percent reported zero hours in this category, and most of the rest said they averaged 5 or less hours on unpaid activity outside their institution (Table 6).

Nature of the work. It was interesting to note that though the computer science faculty members spend little time on unpaid outside activities, they reported the time they spend on service activities is, on average, close to the amount of time they *want* to spend on those activities—3.88 hours vs. 3.48 hours desired (Tables 11 and 17). In contrast, they reported that, on average, they spend *more* time than they want to on teaching (66.25 hours vs. 57.43 hours desired) and on administrative duties (8.97 hours vs. 5.39 hours desired) (Tables 7, 13, 10, and 16). The average hours the respondents spent on research were *less* than the hours they desired for that activity (12.78 hours vs. 21.42 hours desired), as were the hours spent on professional growth (5.25 hours vs. 8.73 desired) and consulting (2.88 hours vs. 3.56 desired) (Tables 8, 14, 9, 15, 12, and 18). When asked about the time they spend doing consulting, 72 percent reported they were doing no consulting at all at that time; however, 68 percent said that they did not *want* to do consulting, so it can be assumed that this was not a problem for them.

Only 16.7 percent of the faculty members reported that they spend time serving on undergraduate honors, thesis, or certification committees or administering undergraduate oral or comprehensive exams; only 9 percent spent time chairing such committees (Tables 19 and 21). Such work was more common on the graduate level, but even there only 34.9 percent said they served on graduate thesis, dissertation, or certification committees or administered graduate-level oral or comprehensive exams, and just under 20 percent were currently serving as chairs of such committees (Tables 20 and 22).

Most of the computer science faculty members reported that they teach three to five classes each semester (the mean was 3.4 classes, with a standard deviation of 2.1—Table 23). As suggested in the background literature, the number of classes taught tended to be higher at the less prestigious institutions (Tables 127A and 127B). Professors at the more elite institutions also tended to have fewer course preparations (that is, they tended to teach multiple sections of the same course, rather than having to prepare different material for each class taught). The respondents reported a mean score of 2.52 courses, with a standard deviation of 1.14 (Table 24). Table 128 shows that at research institutions 72 percent of the faculty said they had no more than two courses to prepare each semester; at doctorate-granting institutions, the number was 83 percent of the CS faculty; at comprehensive institutions, the number was 50 percent of the CS faculty; and at liberal arts institutions, the number was 24 percent of the CS faculty. These findings are consistent with the reality that at larger schools, where there are more students, there is usually more demand for multiple sections of a course; this allows professors to teach more courses in their area of expertise, while at smaller institutions the faculty often must teach a more diverse set of courses.

Few of the faculty surveyed reported devoting a lot of time to office hours: only 8.6 percent said that they spent more than 10 hours a week in office hours, and the mean for the total group was 6.6 hours, with a standard deviation of 5.7 (Table 27). Neither were many of the faculty expected to include remedial classes or continuing education classes in

their courseloads: only 6 to 7 percent of the respondents said they had to teach such classes (Tables 25 and 26).

Opportunities for professional growth. In total, 63 percent of the CS faculty members said they were engaged in creative research or writing activities during the term they were surveyed (Table 28). Of those involved in such activities, 37 percent spent time on basic research, 41 percent on applied research or analysis, and 17 percent on program/curriculum design or development (Table 29). Only 22 percent of the total group reported that their research was funded by an outside agency, but most of those reported that they served as the principal investigator or co-principal investigator on their grants or contracts (Tables 30 and 31). As would be expected, the faculty at research institutions reported higher participation rates in research activities than did their counterparts at other types of institutions (Tables 132A, 132B, 133A, and 133B).

A majority of the institutions encouraged the professional growth of faculty by providing funds for professional travel; 78 percent of the respondents said they qualified for such funds in the term they were surveyed, and 55 percent said they had received funds for that purpose during that term (Table 34). Funds are also provided at many institutions for other types of personal growth and benefit (Tables 32, 33, 35, and 36). Approximately half of those surveyed said they were qualified to receive funds for additional training in teaching or research, though only about 20 percent said they had drawn on such funds during the term of the survey; 64 percent said their institution would pay their fees for their professional associations, though only 26 percent had received such funding. Half of the respondents said their institution would provide tuition remission for them or their families (though only 11 percent had received such funds that term), and 46 percent said they qualified for sabbatical funds (though only 6 percent had drawn that funding during the term of the survey). The low participation rates in these benefits were not necessarily indications that the faculty did not value such benefits, for the need for such funds is usually sporadic in nature; though one might not use tuition remission every semester, for example, it would be

an extremely important benefit during times when the faculty member had children or a spouse attending college. Likewise, a faculty member might be quite likely to value and use funds for travel and professional growth activities in the spring or summer terms, even if he or she did not use such funds during the fall term when the survey was completed.

Autonomy and authority. The computer science faculty members responding to the NSOPF expressed satisfaction with many aspects of their work, particularly in the area of authority on the job: 93 percent said they were satisfied with their authority to decide course content, 82 percent said they were satisfied with the authority they had to decide what courses they would teach, and 70 percent said they were satisfied with their authority to make other job decisions (Tables 37, 38, and 39).

Though a common complaint heard on college campuses is that “the students are not as prepared as they used to be,” a majority of the faculty responding to the survey indicated general satisfaction with their students: 58.8 percent of those for whom it was applicable said they were satisfied with the quality of their undergraduate students, and 70.2 percent of those for whom it was applicable said they were satisfied with the quality of their graduate students (Tables 41 and 42).

Satisfaction with opportunities. Questions about the intrinsic aspects of their work environment brought positive responses from many of the computer science faculty surveyed. As a group, 61 percent expressed satisfaction with their workload (Table 43). When the responses were subdivided according to survey year and institutional type, it was noticeable that the percentage of respondents expressing satisfaction was less in 1999 (54 percent) than it was in 1993 (67 percent), a shift that was particularly marked at doctoral and liberal arts institutions (Tables 147A and 147B). Satisfaction with time available to keep current in their field showed a less dramatic decline from the 1993 survey (40 percent) to the 1999 survey (36 percent—Tables 149A and 149B), resulting in a total satisfaction response of 38 percent. Both of these factors could be attributed to the

general societal trend during the 1990s of people devoting more and more hours to work—a trend that was also reflected in the mean number of paid work hours reported by the CS faculty—from 43.11 hours in the 1993 survey to 47.98 hours in the 1999 survey (Tables F.1a and F.1b).

Some of the faculty attitudes held steady or even improved during that time period, though. Satisfaction with time to advise students was 80 percent in 1993 and 79 percent in 1999 (Tables 144A and 144B); satisfaction with freedom to do consulting was 76 percent in 1993 and 78 percent in 1999 (Tables 150A and 150B). The percentage of faculty expressing satisfaction with their opportunities for advancement moved from 61 percent in 1993 to 68 percent in 1999 (Tables 148A and 148B). And even though the percentage expressing satisfaction with the job overall showed a slight decline (80 percent in 1993 to 73 percent in 1999), it should be noted that this general score of 77 percent satisfaction with the job overall was still a strong endorsement of the academic work environment (Tables 47, 151A, and 151B).

What could induce these faculty to leave such a position for another inside or outside academia? Of the intrinsic factors suggested (advancement opportunities, less pressure to publish, better teaching or research opportunities), only “better advancement opportunities” scored high enough to achieve a median score of “very important” (Tables 48, 49, 50, and 51). And given that, as noted above, the respondents’ satisfaction with their current advancement opportunities appeared to be on the upswing, it appears that many perceive their current job situations to be generally good ones in this respect.

In summary, then, the computer science faculty surveyed in the NSOPF:93 and NSOPF:99 presented a positive picture of the intrinsic factors associated with their work. Faculty members reported that, at least during nine months of the year, they work on average a 45-hour work week, with the majority of that time spent on teaching activities. Though they said that they would like to have more time to devote to research and professional growth, they do have some time for those activities, and those who desire to do consulting on the side seem to be able to carry on that activity in addition to their teaching duties in most cases. The faculty

reported that they taught three to five classes each semester, with an average of two to four different courses to prepare; the number of classes and course preparations tended to be lower at research and doctoral institutions, where research work tended to absorb more of their time.

At first glance, these time demands would seem to be roughly equivalent to the work time reported by computer science professionals in business and industry (National Research Council, 2001). It must be realized, however, that a question not asked or answered on the survey was "How many weeks of the year do you engage in paid activities for your institution?" Most academics enjoy significant breaks between semesters (often two weeks off in May and in August, three to four weeks off during the winter holidays, a week off for spring break, etc.). In addition, many choose not to teach in the summer or choose to carry a reduced work load during those months. It is true that time taken off in the summers is often time without pay, yet for individuals who value a flexible time schedule and for whom the income is a lesser concern, the free time afforded by the academic schedule is a very positive factor which must not be forgotten.

Other positives reported by the NSOPF respondents included high degrees of autonomy and authority to make decisions about what and how they would teach. Faculty from a majority of the schools said that their institutions supported their professional development activities, providing funds for professional travel, memberships in professional organizations, tuition remission, and sabbaticals. These and other positive intrinsic factors seem to contribute to a satisfying professional experience for the faculty surveyed, for despite some reported dissatisfactions here and there, the group expressed strong satisfaction with the job overall (Tables 47, 151A, and 151B).

Research Question 2: What is the nature of the extrinsic factors computer science faculty members experience working at four-year colleges and universities?

Rank and tenure. A majority of the computer science faculty members who responded to the NSOPF reported that they held stable positions of rank in their departments; 80 percent

of those surveyed said they held the rank of assistant professor or higher (Tables 52). The mean ranking rose somewhat between the 1993 and 1999 surveys, as would be expected over six years when professors could qualify for and achieve promotions (Tables 156A and 156B). Nearly half (47 percent) of those surveyed were already tenured, and another 30 percent held tenure-track positions (Table 53). Only 5 percent said that they worked at an institution which did not offer tenure.

Job stability: Tenure is often equated with job stability, but that is not necessarily the case: at many institutions, "tenure" denotes that the individual will not be terminated without warning or some form of due process except in certain dire circumstances, as defined by the institution. While at some schools tenure constitutes a virtual lifetime guarantee of employment, then, at other schools it offers a buffer of one or more years of continued employment at the institution, should termination take place. Questions of job stability in academia therefore must consider not only the possibility of tenure but also what sort of contractual agreements the faculty members hold with their institutions. In the NSOPF survey, about one third of the computer science faculty who answered the question said that they held tenure or a contract of unspecified duration (Table 54). Nearly 40 percent said that they worked on the basis of a one-year contract, and another 13 percent of those responding said that they held contracts for two or more academic or calendar years. Only 12 percent of the respondents said that they worked on the basis of a single semester contract or a contract of some other duration. When asked how many years they had worked in their current job, two thirds of the respondents indicated they had been in the job for 10 years or less.

Yet such statistics may tell more about the relatively recent development of computer science as an academic discipline than about instability in the profession; after all, it was not until the mid-1980s that computer science studies achieved a stand-alone status at many colleges and universities across the country. And in fact, when viewed in comparison to computer science employment trends in business and industry, computer science academics may look

rather stolid: 61 percent of the computer science NSOPF respondents said that they had held only one position in higher education during their careers, and when the cut-off was raised to three or fewer positions, the tally rose to 85 percent of the respondents (Table 56).

Responses to a question about how many years the faculty members had taught in higher education revealed an average of about 14 years (Table 57). Such scores indicate a high degree of stability in the profession, rather than instability.

The NSOPF data for computer science faculty, when viewed in total, indicated that about 70 percent of the faculty work only at one job, while the other 30 percent do work for at least one other employer on the side (Table 58). A division of the responses by survey year, however, reveals that a strong shift took place in this regard—where in the 1993 survey the ratio of those employed only at their institution to those who held a second job elsewhere was 83/17, in the 1999 survey the ratio had moved to 50/50 for the two groups (Tables 162A and 162B). It cannot be determined from the data whether this shift is due to more individuals doing consulting work in addition to their teaching responsibilities or whether the individuals are holding down a part- or full-time position in addition to their full-time employment at the university (the full-time employment at the university being a given, due to the initial filtering that was done on the NSOPF data). This gap in the information offers a small but interesting question for further research.

Quality of facilities. Question c34 on NSOPF:93 and Question 60 on NSOPF:99 asked the respondents to rate many aspects of the facilities, equipment, and support staff provided by their institutions (Tables 60 through 70). Highest marks went to computers and local networks (ranked “good” or “excellent” by 77.2 percent of the respondents for whom they were available) and centralized computer facilities (ranked “good” or “excellent” by 75.5 percent of the respondents for whom they were available). Also earning a “good” or “excellent” from many of the respondents were office space (70.3 percent of the respondents for whom it was available), classroom space (67.2 percent), Internet connections (64.7 percent), and audio-visual equipment (64 percent). Lower approval ratings were registered for library

holdings (51.2 percent) and secretarial support (55 percent). A notable number of the faculty chose the answer "not available/don't know" when asked about research equipment (19 percent), lab space (20 percent) and research assistants (35 percent); among those who did "know" and have them, the approval ratings were not particularly strong (54 percent for research equipment, 51 percent for lab space, and a dismal 27 percent for research assistants).

Satisfaction with tangibles. As they were with several intrinsic factors, the faculty completing the NSOPF were asked to register their satisfaction with a number of extrinsic factors related to their job (Tables 71 through 74). Job security won high marks with the group, with 80 percent of the CS faculty responding that they were satisfied with this aspect of their jobs. Only 27 percent said they were dissatisfied with the local employment opportunities available to their spouses, and 71 percent said they were satisfied with the benefits provided by their institution. Lowest ratings came in the area of salary, with only 46 percent of the respondents indicating they were satisfied with their pay. A division of the responses by survey year revealed that this was an area of some decline (Tables 176A and 176B): 50 percent of the 1993 respondents indicated satisfaction with their salary, but only 42 percent of the 1999 respondents were satisfied with their pay.

How important would these factors be in a faculty member's decision to take another job inside or outside academia? Ranked most important among the extrinsic factors listed in the survey were salary, benefits, job security, geographic location and instructional facilities; of mid-dling importance to the respondents were research facilities and tenure; and of least importance were work opportunities for spouses and good schools for their children (Tables 75 through 83). It should be noted that the rankings for the spouse and children's needs were lower, in part, because many respondents said those factors were "not applicable" for them.

Income earned. Tables 84, 85, and 86 show in a stratified format the income information reported by the computer science faculty on the NSOPF. The data revealed that 60 percent of the respondents had an earned income from their institution between \$30,000 and

\$59,999 in the year they were surveyed (Table 84). The raw data for the entire group showed a median income of \$49,000 from their institution, and the stratified data also showed a mean score that fell in the “\$40,000 to \$49,999” category. When the data were divided by survey year and type of institution, it was clear that most of the highest salaries were reported by faculty at the more prestigious institutions and that, as would be expected, the salary levels generally were higher on the 1999 survey than they were on the 1993 survey (Tables 188A and 188B).

The shift upward between the 1993 survey and the 1999 survey could also be seen on the question of total personal income (which referred to all income earned by the respondent from all sources that year, but which did not include a spouse’s income—Tables 85, 189A, and 189B). The mean of the stratified total data fell in the “\$50,000 to \$59,999” category on this question, but when divided by survey year the data also showed a strong shift toward the “\$70,000 to \$79,999” and the “\$80,000 to \$89,999” ranges in all institution categories on the 1999 survey.

Many of those surveyed apparently benefited from a second income in their households; the numbers reported for total household income were noticeably higher than those reported for total personal incomes. The raw data for total household incomes produced a median of \$72,199, and the mean of the stratified data was 6.94, falling on the cusp between the “\$60,000 to \$69,999” and the “\$70,000 to \$79,999” ranges (Table 86).

In summary, then, the CS professionals surveyed in the NSOPF:93 and NSOPF:99 reported many positives when asked about extrinsic factors associated with their work. Nearly 80 percent of those surveyed said they were tenured or employed in a tenure-track position; a majority of them did not work for an outside employer. They enjoyed a great deal of stability in their profession—85 percent of them had held no more than three different jobs during their career in higher education. For a majority of those surveyed, the physical conditions in which they worked (computer facilities, office and classroom space, and related equipment) were satisfactory. Most expressed satisfaction with their benefits and the level of job security they held in academia. The only serious negative among the extrinsic factors arose in the area of salary, where more than half of the respondents expressed some degree of dissatisfaction.

From the data gathered, it appears that the respondents' dissatisfaction with salary had a somewhat shaky basis: the average income reported on the 1999 survey fell squarely in the \$50,000 to \$59,999 category (Table F.74a), which is close to the \$52,180 median annual earnings reported for computer systems analysts during that same time by the U.S. Department of Labor and a bit lower than the \$61,910 mean earnings for computer engineers in that year (U.S. Department of Labor, 2001). Most of salaries reported on the 1999 surveys fell in the range of \$30,000 to \$80,000; though the upper end of this range corresponds to the upper end of salary ranges for CS professionals in business and industry at that time, the lower end of the range begins \$10,000 to \$20,000 lower than the range estimated for industry professionals at that time (U.S. Department of Labor, 2001). It is probably at this lower end, then, where more dissatisfaction lurks among the faculty. When the 1999 salaries were crosstabulated with the respondents' number of years on the job, the data revealed that the faculty who were earning "starting salaries" were earning an average of \$45,000 a year, which did not compare favorably with the industry starting salaries, estimated to average in the low \$60,000 range at that time (U.S. Department of Labor, 2001).

If, indeed, the literature is correct and the absence of extrinsic factors can lead to job dissatisfaction, lower salaries do pose potential problems for university administrators trying to attract CS professionals to teaching—particularly if young candidates are comparing starting salaries in academia to starting salaries in industry. The data suggest, however, that over time this effect may be neutralized somewhat as the academics move upward through the pay ranks and begin enjoying the stability and pleasant work environment of the campus culture.

Research Question 3: What is the demographic profile of the computer science faculty members surveyed in NSOPF:93 and NSOPF:99?

Academic background. The computer science faculty surveyed through the NSOPF were a highly educated group, as would be expected: 62 percent said they held a doctorate degree and another 34 percent had earned a master's degree (Table 87). They were not a homogeneous group, however, in regard to the disciplines in which they had earned their highest

degree. Nearly 50 percent of the group had earned a degree in computer science, computer and information sciences, computer programming, systems analysis, or another computer related field; 12 percent of the group had earned their highest degree in math, statistics, or engineering (Table 88). That left more than one third of the group, however, who had earned degrees in other fields, in disciplines as diverse as business, education, physical science, and parks and recreation.

One might expect that, in a new and growing discipline like computer science, early faculty recruits would have to be pulled from other disciplines, since it would take some time for graduate level programs to develop and produce computer science doctoral students who could then return to populate the faculty ranks. With the maturing of the discipline, however, one would expect to see more and more faculty with terminal degrees in computer science. With this in mind, the data were examined to see if the percentage of faculty with computer science degrees had increased from the 1993 survey to the 1999 survey (Tables 192A and 192B). However, such was not the case. In fact, the percentage of faculty with training in a computer science discipline actually dropped from 51 percent in the 1993 survey to 46 percent in the 1999 survey. These findings would suggest that (a) the discipline is still maturing or (b) graduates with terminal degrees in computer science were not stepping into the teaching ranks but were taking jobs outside academia after graduation.

Age, gender, ethnicity: The demographic data from NSOPF:93 and NSOPF:99 showed the computer science faculty members generally fit the stereotype for computer science professionals—young, white, and male. The data indicated that 80 percent of the respondents fell into the age range of 30 to 55; as would be expected with the passage of time, the mean age shifted slightly higher from 1993 to 1999 (Table F.78a). On the 1993 survey, 75 percent of the respondents were male. In 1999, 78 percent were male, which suggested that women did not make significant headway in the profession during the 1990s (Tables 193A and 193B). When asked to report their ethnicity, 74 percent of the respondents

in 1993 identified themselves as white, and the percentage rose to 77 percent in the 1999 survey (Tables 195A and 195B).

Most of the computer science faculty surveyed said they were married (78.7 percent—Table 92); only 7.8 percent said they were separated, divorced, or widowed, and another 13 percent said they were single and had never married. Just under 16 percent of those with spouses said that their spouse was also employed in higher education, though the percentage was noticeably higher at doctoral institutions (28 percent—Table 197).

A majority of the faculty (72 percent) said they were American by birth (Table 94), though the percentage of internationals was higher at research institutions (Tables 198A and 198B). The results of a second question about their country of origin did not line up precisely with the responses to the earlier question (Table 95); in the second instance, 73 percent said they were native citizens, just under 9 percent said they were naturalized citizens, 14 percent said they were in the United States on a permanent visa, and 3 percent said they were in the United States on a temporary visa. Whichever of the two questions elicited the most accurate response, it was still clear that only about one quarter of the faculty surveyed had come to the United States from another country.

Future plans for employment. The faculty members' responses to questions about retirement reflected a general satisfaction with their current profession. When asked whether they would be likely to take a part-time or full-time job elsewhere during the next three years, they indicated that they were more likely to take a different job at another institution (45 percent) than to take a different job outside of academia (33 percent—Tables 96 through 99). Only 1.7 percent said they had already retired from another position (Table 103) and nearly 88 percent said they were not at all likely to retire during the next three years (Table 100)—responses that were consistent with the relatively young ages found in this group. When asked when they were most likely to retire from their current job, the faculty gave a mean response of 64.5 years (Table 101); when asked when they were most likely to retire from all employment, the mean response was only slightly higher (66.2 years—Table 105). All of these responses

indicate a general satisfaction with their current work situation and a belief that the salary and benefits accrued will enable them to retire comfortably at a reasonable age.

On the 1999 survey, the faculty members were asked to identify the one factor that would most influence a decision to leave their present position (Table 106). "Salary level" topped the list of favorites at 37 percent. "Greater opportunity to do research" came in second at 15 percent, though faculty at research and doctoral institutions tended to give more weight to the response. Other factors which drew a moderate response were "job security" (6.9 percent), "job for spouse" (6.0 percent), and "good geographic location" (6.2 percent).

In summary, then, the demographic factors reported on the NSOPF:93 and NSOPF:99 showed the respondents to be a highly educated group, though only half of them had earned their highest degree in computer science or a related field. A majority of the faculty fell between the ages of 30 and 55, and the group was primarily white and male—results which mirrored the findings of the Taulbee Survey of the profession in recent years (Bryant & Irwin, 2001). The faculty surveyed expressed a general satisfaction with their current work situations and confidence that the salary and benefits accrued will enable them to retire comfortably at a reasonable age.

Research Question 4: Are there differences in the reported working conditions experienced by computer science faculty members at research universities and doctorate-granting universities when compared with those of faculty at other four-year institutions?

Independent samples t-tests run to compare the means of answers from faculty at research and doctorate-granting institutions vs. those of faculty at comprehensive and liberal arts institutions revealed some differences in the working conditions experienced by those groups. Table 211 lists all of the questions that elicited responses from the two groups which were statistically significantly different. Those results can be summarized as follows:

- Faculty members at the "elite" (research and doctorate-granting) universities spent less time on teaching, professional growth activities, and office hours—but more time doing research—than did their counterparts at other schools. On average,

faculty at the elite institutions worked 3.9 hours more per week on paid activities than did their counterparts, on average. Faculty at research institutions “set the curve” in this regard, averaging 49.8 hours per week while faculty at doctoral institutions averaged 45.6 hours per week.

- Faculty members at the “elite” universities *preferred*, on average, to spend less time on teaching and professional growth—but more time doing research—than their counterparts said they would prefer to do, on average.
- Faculty members at “elite” universities taught fewer classes and had fewer courses to prepare than did their counterparts at other schools. They also on average expressed a higher level of satisfaction with the amount of time they had to stay current in their field, when compared with the average responses of faculty members at other schools.
- Faculty members at “elite” universities on average spent more time serving on graduate committees and more time chairing graduate committees than did their counterparts at other schools.
- Faculty members at “elite” universities spent fewer hours on consulting than did their counterparts at other universities, and they preferred to spend fewer hours that way, compared to their counterparts.
- Faculty members at “elite” universities were more likely to be engaged in creative work or research, particularly on funded research; they were also more likely than their counterparts at other schools, on average, to be serving as a principal investigator or a co-principal investigator on a grant or contract.
- Faculty members at “elite” universities were more likely to qualify for tuition remission for themselves or their families, than were their counterparts elsewhere.
- Faculty members at “elite” universities on average gave higher ratings to the quality of their research equipment, their centralized computer facilities, and their Internet

connections than did the faculty, on average, at the other schools. They also placed more value on the importance of good research facilities than did their counterparts.

- Faculty members at “elite” institutions on average expressed less concern over “the pressure to publish” than did the faculty at other schools.
- Faculty members at “elite” institutions reported higher average incomes from the institutions, higher average personal incomes from all sources, and higher average household incomes than did the faculty at other schools. On all of these questions, the faculty at “elite” institutions averaged about \$10,000 more than the average reported by CS faculties at other schools. The average incomes of faculty at research institutions were significantly higher than those of faculty at doctorate-granting institutions: for example, on “Total Personal Income, All Sources,” the research faculty members reported a mean of \$73,568 while the faculty members at doctoral institutions reported a mean of \$58,876.

What was *not* statistically significantly different between the two groups is also worth noting:

- Both groups spent about the same amount of time, on average, on administrative duties and on service activities.
- Neither group devoted much time to teaching remedial or continuing education classes.
- Faculty members at comprehensive universities and liberal arts colleges were just as likely as their counterparts at “elite” schools to have funding provided for professional travel, professional associations, continued training, or sabbatical leave.
- Both groups expressed satisfaction with the level of authority and autonomy they had in their jobs.
- There was no statistically significant difference in the level of satisfaction the groups expressed about their workloads, their opportunities for advancement, their freedom to do consulting, and their jobs overall.

- There was no statistically significant difference in the level of satisfaction the groups expressed about their job security, their benefits, and job opportunities for their spouses.
- The faculty at comprehensive and liberal arts universities rated their office and classroom space, their individual computer equipment, and their library holdings just as positively as did their counterparts at the “elite” schools.
- Demographically, there were no statistically significant differences between the two populations.
- Both groups, on average, had experienced a great deal of job stability; few had changed jobs more than two or three times over the course of their careers.
- Though the average earnings of the two groups were different, there was no statistically significant difference in the groups’ levels of satisfaction with their salary. No matter what their incomes were, both groups tended to express dissatisfaction in this area.

Research Question 5: Were the working conditions reported by computer science faculty in NSOPF:93 different from those reported by computer science faculty in NSOPF:99?

Independent samples t-tests run to compare the means of answers from NSOPF:93 with those from NSOPF:99 revealed differences in the working conditions computer science faculty described in those surveys on 27 out of 89 questions. Table 212 lists all of the questions that elicited responses which were statistically significantly different between the two surveys.

Those results can be summarized as follows:

- Respondents to the 1999 survey reported more hours per week devoted to paid work activities (4.87 hours more, on average) than did the 1993 respondents, but they also reported fewer hours per week (2.51 hours) spent on unpaid activities at their institutions.
- Fewer respondents qualified for funds for professional travel or professional training in 1999 than did the respondents in 1993.

- The 1999 respondents on average expressed greater satisfaction with their authority to decide what and how they teach, their authority to make other job decisions, and with the time they had available to advise students, than did the 1993 respondents. However, the 1999 respondents on average expressed less satisfaction with their workload and with their jobs overall than did the respondents in 1993.
- Statistics that had to do with the passage of time were predictably higher in 1999: the mean age of the respondents was higher, and they reported, on average, more years at their current job.
- The 1993 respondents expressed greater satisfaction, on average, with the physical aspects of their work settings (research equipment, lab space, audio-visual equipment, classrooms and office space) and with their secretarial staffs than did, on average, the 1999 respondents.
- The 1999 respondents expressed more satisfaction with their job security, on average, than their counterparts in 1993.
- There was less concern among the 1999 respondents about job opportunities for spouses and having good schools for their children than was expressed by the computer science faculty members surveyed in 1993. (This phenomenon could be tied, of course, to the advancing age of computer science faculty members in general and their progress over time toward higher salaries; as they get older, they are less likely to have school-aged children at home, and as they become more settled and earn higher pay, the need for a second income may be less pressing.)
- There was a statistically significant increase in the incomes from institution, total personal incomes, and total household incomes reported in 1999, over those reported in 1993.

In summary, most of the statistically significant differences between the 1993 survey and the 1999 survey reflected mildly positive developments in working conditions. Though the faculty members may have experienced a slight increase in the time they devote to their work, and a tougher economy may have tightened up the availability of funds for travel and continuing

education, these changes seemed to be balanced by better pay and more satisfaction with levels of autonomy, authority, and security.

Implications for Policy, Practice, and Theory

The information accrued from the National Study of Postsecondary Faculty in 1993 and 1999 offers many insights for computer science policymakers and administrators:

1. Those who administer computer science programs in a collegiate setting should find this profile to be a helpful tool for benchmarking their programs, to assess how their programs fall short or exceed the norms nationwide. This should provide useful data to inform their decision making, raising their context from that of institutional norms to a broader, nationwide perspective.

2. Administrators who seek to recruit candidates for computer science teaching positions should take note that “salary level” was the factor that, on average, carried the greatest weight in decisions to change jobs. Administrators would be wise, in light of these findings, to make every effort to lobby for strong starting salaries for their computer science faculty slots; salaries should be benchmarked regularly with industry averages, and best attempts made to offer starting salaries that are roughly comparable to those in industry.

However, there certainly are limits to what administrators can do in improving salary levels, especially during times when many public and private institutions are facing significant budget shortfalls. *The data gathered in this study also suggest that, in such circumstances, academic recruiters can and should whenever possible offer candidates a high degree of autonomy, flexible work time, tuition remission, and institutional support for professional growth through travel, continued training, professional organizations, and sabbaticals.* The presence of these positive intrinsic factors apparently helped offset salary issues to some degree, because computer science faculty members concerned about their salaries *still* voiced a high degree of satisfaction with their work in general.

Higher education administrators should also note that the opportunity to do research may be an attractive plus at institutions where research is emphasized, but that faculty members at smaller institutions registered the same level of job satisfaction as those at the more elite research institutions. There was no statistically significant difference in the level of satisfaction the groups expressed about their workloads, their opportunities for advancement, their freedom to do consulting, and their jobs overall. *What therefore may be most important in recruiting faculty members is ascertaining that there is a good fit between the aspirations of the job candidates and the work environment at one's school; there are apparently many who do not desire to do cutting-edge research and who would be well suited to work in a college where teaching receives a greater emphasis.*

The data also suggest that academic administrators would do well in looking toward candidates in business and industry who are reaching the middle of their careers. As noted earlier, starting salaries for CS professionals in industry were higher than the average starting salaries in academia, but some leveling took place as those workers progressed in their careers. In addition, the literature suggested that computer science in business settings tends to be geared toward the young, mobile worker who is willing to hopscotch from one employer to another (National Research Council, 2001). Administrators who recruit CS professionals who are nearing the middle of their business careers may find that these individuals have tired of "the thrill of the chase" and are ready for a work environment that offers stability, job security, and excellent educational opportunities for themselves and their families. This would be a particularly good approach for administrators at comprehensive and liberal arts institutions, where there is less emphasis on continuing research and more emphasis on teaching applied knowledge in computer science.

3. Policymakers on the state and national level should consider these data when making decisions on budgets for state-supported public universities and when considering programs to support research and training in computer science. In periods when economic realities press policymakers to minimize government spending, it might seem prudent to cap faculty salaries at

public universities and to postpone research and training initiatives. However, given the great need in all business sectors for well-educated computer science professionals, these would be acts of false economy, for policies which make it difficult to hire computer science professors will limit educational opportunities in this field and, in effect, the number of trained computer science workers entering the marketplace. Instead, policymakers would be wise to promote programs that support this area of teaching and research; given the demographics of the faculties surveyed, it appears that programs that encourage the participation of women and minorities in the field would be of particular value.

Finally, though the primary aim of this study was not to prove or disprove the “motivator/hygiene” theory of job satisfaction, it is interesting to note that the responses of computer science faculty on the NSOPF:93 and NSOPF:99 do appear to be consistent with the theories of Herzberg et al. (1959). The faculty members’ positive responses to questions about intrinsic factors and the relatively few negatives they expressed about extrinsic factors would lead one to expect, according to the “motivator/hygiene” theory, that these workers would perceive their jobs to be satisfying. And indeed, the faculty members did, on average, express a general satisfaction with their jobs overall. These responses do not provide any conclusive evidence about the relative importance of the various intrinsic or extrinsic factors in relation to each other, but they do suggest that it is worthwhile, as Herzberg recommends, to consider both intrinsic and extrinsic factors in studies on job satisfaction.

Recommendations for Further Research

The data gathered through the 1993 and 1999 National Study of Postsecondary Faculty offer a wealth of opportunities for future research. This study analyzed a small, specialized subgroup of the total population surveyed and offered a broad profile of that subgroup. The same dataset could be used to conduct more focused, in-depth studies on particular aspects of the profession. Do the experiences of women in the profession mirror those of the men? What are the particular satisfactions and dissatisfactions of minorities in the

field, and what could be done to attract minority CS professionals to teaching? What could regression analysis or other more sophisticated statistical tools reveal about the relative importance of various intrinsic and extrinsic factors in this setting? These questions and many others merit closer looks from future researchers.

Opportunities for future research extend beyond the study of computer science faculties at four-year institutions. Data from many other disciplines are available for analysis and comparison in the NSOPF database. Information on community college faculties is also available through these surveys and could be analyzed with an eye toward how the work experiences at these institutions are similar to or different from the experiences reported at other types of institutions.

Another great opportunity for further research will come in the next two years as the U.S. Department of Education researchers conduct another cycle of the NSOPF. Plans call for faculty surveys to be completed and returned during the 2003-04 academic year, and data from the new round of surveys should become available to researchers in 2005. It would be valuable to incorporate these new results with the findings of the current study on computer science faculty, to strengthen the longitudinal aspect of the research. The addition of these data could also make it possible to address the question of whether the perceptions reported in the NSOPF vary in different economic climates. Faculty who responded to the 1993 and 1999 surveys were teaching during a strong economic upturn, when computer science professionals were on the cutting edge of unprecedented growth in a great number of industries. It is probable that these faculty members' perceptions about their jobs were influenced somewhat by their perceptions of what computer science jobs outside academia were like. However, the new millennium brought with it the crash of the "dot-coms" and a different economic outlook in general; it would be interesting, therefore, to explore whether faculty perceptions about their work are the same or different in this new economic context. The next round of the NSOPF offers this very opportunity, making it an excellent resource for future research.

Summary

The purpose of this study was to compile data profiling the work conditions and satisfactions experienced by computer science faculty at four-year colleges and universities in the United States during the years from 1993 to 1999. Computer science faculty responses to the National Study of Postsecondary Faculty were used to describe intrinsic and extrinsic factors relating to the profession and satisfactions/dissatisfactions reported by the faculty. Demographic information was also used to create a profile of those teaching computer science in colleges and universities. Independent samples t-tests revealed statistically significant differences between the experiences of faculty at research and doctoral institutions and those of faculty at comprehensive and liberal arts institutions, but those differences in work habits and salaries did not result in differences in satisfaction: no matter their type of institution, the faculty members were on average satisfied with their jobs overall. A means analysis of responses subgrouped by survey year showed differences between the subgroups, most of which related to the maturation of the discipline. The information derived from all of these analyses could form the basis for interesting future research, but it also will be of immediate value to higher education administrators and policymakers seeking to recruit qualified computer science professionals to the teaching profession.

APPENDICES

APPENDIX A

Identification Codes and Questionnaire Wording for Selected Variables,
1999 National Study of Postsecondary Faculty

Source: U.S. Department of Education National Center for Education Statistics (2001). Codebook for the 1999 National Study of Postsecondary Faculty. Washington, D.C.

The variables listed below are those used in the study. Listed for each variable is the identification code, the label, and the wording of the question as it appeared on the 1999 survey. The corresponding question numbers from the 1993 NSOPF appear in brackets after the title of each variable. In some instances the decision was made to use derived variables created by the researchers at the National Center for Education Statistics, rather than the original data variables transcribed from the surveys; those instances are noted accordingly below.

Q2 Instruction: Credit or noncredit instructional duties [*z1a, 1993*]

2. During the 1998 Fall Term, were all of your instructional duties related to credit courses, or advising or supervising academic activities for which students received credit, some of your instructional duties related to credit courses or advising or supervising academic activities for which students received credit OR all of your instructional duties related to noncredit courses or advising or supervising noncredit academic activities.?

All duties for credit

Some duties for credit

All duties not for credit

Q 3 Employment, current: Principal activity [*z2, 1993*]

3. What was your principal activity at this institution during the 1998 Fall Term? If you had equal responsibilities, please select one.

Teaching

Research

Clinical service

Administration

On sabbatical from this institution

Other activity

Dean, Act/Int/Assoc/Asst Dean

Chair, Acting/Assoc/Assistant Chair

Director/Head/Coordinator

President, Chief

Assistant to the President

VP, Assoc/Assistant VP

Administrator, Manager

Chancellor, Provost

Chaplain

Advisor, Counselor
 Librarian, Library Director
 Registrar
 Secretary, miscellaneous clerical
 Adjunct (unspecified)
 Athletic Director, Coach
 Other Administrative

Q4 Employment, current: Faculty status [*z3, 1993*]

4. During the 1998 Fall Term, did you have faculty status at this institution?

Yes

No

Q5 Control Variable: Full- or part-time employment at this institution [*a4, 1993*]

5. During the 1998 Fall Term, did this institution consider you to be employed part-time or full-time?

Part-time

Full-time

Q7 Employment, current: Year began current job [*a6, 1993*]

7. In what year did you begin the job you held at this institution during the 1998 Fall Term?

Consider promotions in rank as part of the same job.

Note: NCES derived variables x01_7 (1999) and x01A6 (1993) were used for statistical analysis on this question.

Q8 Employment, current: Rank [*a9, 1993*]

8. Which of the following best describes your academic rank, title, or position at this institution during the 1998 Fall Term?

NA

Professor

Associate Professor

Assistant Professor

Instructor

Lecturer

Other title

Q10 Employment, current: Tenure status, collapsed [*a7, 1993*]

10. What was your tenure status at this institution during the 1998 Fall Term?

Tenured

On tenure track, but not tenured

Not on tenure track, but inst has tenure

No tenure system at this institution

Q11 Employment, current: Duration of contract [a8, 1993]

11. During the 1998 Fall Term, what was the duration of your contract or appointment at this institution?

- Unspecified duration, or tenured
- One academic term
- One academic year or one calendar year
- Two or more academic/calendar years

Q14 Employment, current: Principal field of teaching all categories [a12a, 1993]

14. What is your principal field or discipline of teaching? If equal areas, select one.

[more than 200 field options offered, including

- 201 computer & information sciences
- 202 computer programming
- 203 data processing
- 204 systems analysis
- 210 other computer science]

Q16a1 Education: Highest degree [b16a1, 1993]

16a1. Not counting honorary degrees, what was the highest degree you have received?

- First-professional degree
- Doctoral degree
- MFA, MSW
- Other Master's degree
- Bachelor's degree
- Associate's degree or equivalent
- Certificate or diploma for undergrad

Q16d1 Education: Highest degree, field [b16c1, 1993]

16d1. What is the field in which you received this degree?

- [more than 200 field options offered, including
- 201 computer & information sciences
- 202 computer programming
- 203 data processing
- 204 systems analysis
- 210 other computer science]

Q20 Employment, current: Other employment, fall 1998, consulting [b17, 1993]

20. During the 1998 Fall Term, did you do outside consulting in addition to your employment at this institution?

- Yes
- No

Q21 Employment, current: Other employment, fall 1998, non-consulting [b17, 1993]

21. During the 1998 Fall Term, did you have professional employment other than consulting in addition to your employment at this institution?

Yes

No

Q22 Employment, current: Other employment, fall 1998, number of positions [b17a, 1993]

22. How many different professional jobs/positions, other than your employment at this institution or consulting jobs, did you have during the 1998 Fall Term?

Q23 Employment, past: Number of positions in higher ed during career [no equiv. 1993]

23. In total, how many professional positions in higher education institutions have you held?

Q25 Employment, past: Number of years teaching in higher ed institution [no equiv. 1993]

25. How many years have you been teaching in higher education institutions?

Q30A Workload: Hours/week paid activities at institution [c36a, 1993]

30a. On average, how many hours per week did you spend on all paid activities at this institution (e.g. teaching, clinical service, class preparation, research, administration) during the 1998 Fall Term?

Q30B Workload: Hours/week unpaid activities at institution [c36b, 1993]

30b. On average, how many hours per week did you spend on all unpaid activities at this institution during the 1998 Fall Term?

Q30C Workload: Hours/week paid activity not at institution [c36c, 1993]

30c. On average, how many hours per week did you spend on any other paid activities outside this institution (e.g., consulting, working on other jobs) during the 1998 Fall Term?

Q30D Workload: Hours/week unpaid (pro bono) activity not at institution [c36d, 1993]

30d. On average, how many hours per week did you spend on unpaid (pro bono) professional service activities outside this institution during the 1998 Fall Term?

Q31A1 Workload: Time actually spent at teaching undergraduates [c37aa, 1993]

31a1. What percent of your time do you spend teaching undergraduate students (including teaching; grading papers; preparing courses; developing new curricula; advising or supervising students; supervising student teachers and interns; working with student organizations or intramural athletics)?

Q31A2 Workload: Time actually spent at teaching graduates [c37aa, 1993]

31a2. What percent of your time do you spend teaching graduate or first-professional students (including teaching; grading papers; preparing courses; developing new curricula; advising or supervising students; supervising student teachers and interns; supervising clinical students; working with student organizations or intramural athletics)?

Q31A3 Workload: Time actually spent at research [*c37ab, 1993*]

31a3. What percent of your time do you spend in research/scholarship activities (including research; reviewing or preparing articles or books; attending or preparing for professional meetings or conferences; reviewing proposals; seeking outside funding; giving performances or exhibitions in the fine or applied arts; or giving speeches)?

Q31A4 Workload: Time actually spent on professional growth [*c37ac, 1993*]

31a4. What percent of your time do you spend in professional growth activities (including taking courses; pursuing an advanced degree; other professional development activities; such as practice or activities to remain current in your field)?

Q31A5 Workload: Time actually spent at administration [*c37ad, 1993*]

31a5. What percent of your time do you spend in administration (including departmental or institution-wide meetings or committee work)?

Q31A6 Workload: Time actually spent on service activity [*c37af, 1993*]

31a6. What percent of your time do you spend in service activities (including providing legal or medical services or psychological counseling to clients or patients; paid or unpaid community or public service; service to professional societies/associations)?

Q31A7 Workload: Time actually spent on consulting [*c37ae, 1993*]

31a7. What percent of your time do you spend in outside consulting, freelance work, other outside work/other non-teaching professional activities (other activities or work not listed in a-f)?

Q31B1 Workload: Time preferred at teaching undergraduates [*c37ba, 1993*]

31a1. What percent of your time would you prefer to spend teaching undergraduate students (including teaching; grading papers; preparing courses; developing new curricula; advising or supervising students; supervising student teachers and interns; working with student organizations or intramural athletics)?

Q31B2 Workload: Time preferred at teaching graduates [*c37ba, 1993*]

31a2. What percent of your time would you prefer to spend teaching graduate or first-professional students (including teaching; grading papers; preparing courses; developing new curricula; advising or supervising students; supervising student teachers and interns; supervising clinical students; working with student organizations or intramural athletics)?

Q31B3 Workload: Time preferred at research [*c37bb, 1993*]

31a3. What percent of your time would you prefer to spend in research/scholarship activities (including research; reviewing or preparing articles or books; attending or preparing for professional meetings or conferences; reviewing proposals; seeking outside funding; giving performances or exhibitions in the fine or applied arts; or giving speeches)?

Q31B4 Workload: Time preferred on professional growth [*c37bc, 1993*]

31a4. What percent of your time would you prefer to spend in professional growth activities (including taking courses; pursuing an advanced degree; other professional development activities; such as practice or activities to remain current in your field)?

Q31B5 Workload: Time preferred at administration [*c37bd, 1993*]

31a5. What percent of your time would you prefer to spend in administration (including departmental or institution-wide meetings or committee work)?

Q31B6 Workload: Time preferred on service activity [*c37bf, 1993*]

31b6. What percent of your time would you prefer to spend on service activities?

Q31B7 Workload: Time preferred on consulting [*c37be, 1993*]

31b7. What percent of your time would you prefer to spend in outside consulting, freelance work, other outside work/other non-teaching professional activities (other activities or work not listed in a-f)?

Q32A1 Instruction, committees: Served on, number of undergraduate committees [*c21a1, c21a2 & c21a3, 1993*]

32a1. During the 1998 Fall Term, how many undergraduate thesis honors committees; comprehensive exams or orals committees; examination/certification committees did you serve on?

Q32A2 Instruction, committees: Served on, number of graduate committees [*c21a4, c21a5 & c21a6, 1993*]

32a2. During the 1998 Fall Term, how many graduate thesis or dissertation committees; comprehensive exams or orals committees (other than as part of thesis/dissertation committees); examination/certification committees did you serve on?

Q32B1 Instruction, committees: Chaired undergraduate committees [*c21b1, c21b2 & c21b3, 1993*]

32a1. During the 1998 Fall Term, how many undergraduate thesis honors committees; comprehensive exams or orals committees; examination/certification committees did you chair?

Q32B2 Instruction, committees: Chaired graduate committees [*c21b4, c21b5 & c21b6, 1993*]

32a2. During the 1998 Fall Term, how many graduate thesis or dissertation committees; comprehensive exams or orals committees (other than as part of thesis/dissertation committees); examination/certification committees did you chair?

Q33 Instruction: Classes taught, total [*c22, 1993*]

33. During the 1998 Fall Term, what was the total number of classes or sections you taught at this institution?

Q34 Instruction: Courses taught, total [*no equiv. 1993*]

34. How many different courses (preparations) do these classes/sections represent?

Q35 Instruction: Classes taught, remedial *[no equiv. 1993]*

35. How many of the classes/sections that you taught during the 1998 Fall Term were remedial?

Q37 Instruction: Classes taught, continuing education *[no equiv. 1993]*

37. How many of the classes/sections that you taught during the 1998 Fall Term were continuing education classes?

Q51 Instruction, individual: Total regular scheduled office hrs/week *[c26. 1993]*

51. During the 1998 Fall Term, how many regularly scheduled office hours did you have per week?

Q52 Research: Any creative work/writing/research *[c28. 1993]*

52. During the 1998 Fall Term, were you engaged in any professional research, proposal writing, creative writing, or creative works (either funded or non-funded) at this institution?

Yes

No

Q53 Research: Any creative work/writing/research, type *[c29. 1993]*

53. How would you describe your primary professional research, writing, or creative work during the 1998 Fall Term?

Basic research

Applied or policy-oriented research

Literary, performance or exhibitions

Program/curriculum design

Other

Clinical

Grant writing/proposals

Writing textbooks

Both basic and applied

Q54 Research: Any funded research *[c30. 1993]*

54. During the 1998 Fall Term were you engaged in any funded research or funded creative work? Include any grants, contracts, or institutional awards. Do not include consulting services.

Yes

No

Q55 Research: Any funded research, PI/Co-PI *[c31. 1993]*

55. During the 1998 Fall Term, were you a principal investigator (PI) or co-principal investigator (Co-PI) for any grants or contracts?

Yes

No

Q60A Rating: Rating of basic research equipment/instruments *[c34a. 1993]*

60a. How satisfied are you with basic research equipment or instruments?

- Poor
- Fair
- Good
- Excellent
- Not available/Not applicable/DK

Q60B Rating: Rating of laboratory space and supplies [c34b, 1993]

60b. How satisfied are you with laboratory or research space and supplies?

- Poor
- Fair
- Good
- Excellent
- Not available/Not applicable/DK

Q60D Rating: Rating of availability of research assistants [c34c, 1993] 0d. How satisfied are you with availability of research assistants?

- Poor
- Fair
- Good
- Excellent
- Not available/Not applicable/DK

Q60E Rating: Rating of personal computers and local networks [c34d, 1993]

60e. How satisfied are you with personal computers and local networks?

- Poor
- Fair
- Good
- Excellent
- Not available/Not applicable/DK

Q60F Rating: Rating of centralized computer facilities [c34e, 1993]

60f. How satisfied are you with centralized (main frame) computer facilities?

- Poor
- Fair
- Good
- Excellent
- Not available/Not applicable/DK

Q60G Rating: Rating of Internet connections [c34f, 1993]

60g. How satisfied are you with internet connections?

- Poor
- Fair
- Good
- Excellent
- Not available/Not applicable/DK

Q60I Rating: Rating of audio-visual equipment [c34g, 1993]

60i. How satisfied are you with audio-visual equipment?

- Poor
- Fair
- Good
- Excellent
- Not available/Not applicable/DK

Q60J Rating: Rating of classroom space [c34h, 1993]

60j. How satisfied are you with classroom space?

- Poor
- Fair
- Good
- Excellent
- Not available/Not applicable/DK

Q60K Rating: Rating of office space [c34i, 1993]

60k. How satisfied are you with office space?

- Poor
- Fair
- Good
- Excellent
- Not available/Not applicable/DK

Q60M Rating: Rating of secretarial support [c34k, 1993]

60m. How satisfied are you with secretarial support?

- Poor
- Fair
- Good
- Excellent
- Not available/Not applicable/DK

Q60N Rating: Rating of library holdings [c34l, 1993]

60n. How satisfied are you with library holdings?

- Poor
- Fair
- Good
- Excellent
- Not available/Not applicable/DK

Q61A Professional development: Internal tuition remission funds [c35a1 & c35b1, 1993]

61a. During the past two years, did you use institutional funds for any of the purposes specified below? Tuition remission at this or other institution

- Yes
- No, although funds were available

No, no funds available/not eligible
 No, DK if funds were available

Q61B Professional development: Internal prof. assoc. funds [*c35a2 & c35b2, 1993*]

61b. During the past two years, did you use institutional funds for any of the purposes specified below? Professional association memberships and/or registration fees

Yes
 No, although funds were available
 No, no funds available/not eligible
 No, DK if funds were available

Q61C Professional development: Internal prof. travel funds [*c35a3 & c35b3, 1993*]

61c. During the past two years, did you use institutional funds for any of the purposes specified below? Professional travel

Yes
 No, although funds were available
 No, no funds available/not eligible
 No, DK if funds were available

Q61D Professional development: Internal training to improve res/teaching [*c35a4 & c35b4, 1993*]

61d. During the past two years, did you use institutional funds for any of the purposes specified below? Training to improve research or teaching skills

Yes
 No, although funds were available
 No, no funds available/not eligible
 No, DK if funds were available

Q61F Professional development: Internal sabbatical leave [*c35a6 & c35b6, 1993*]

61f. During the past two years, did you use institutional funds for any of the purposes specified below? Sabbatical leave

Yes
 No, although funds were available
 No, no funds available/not eligible
 No, DK if funds were available

Q65A Satisfaction: Satisfaction with authority to decide course content [*d39a, 1993*]

65a. How satisfied are you with the authority you have to make decisions about conte..

Very dissatisfied
 Somewhat dissatisfied
 Somewhat satisfied
 Very satisfied

Q65B Satisfaction: Satisfaction with authority to decide courses taught [d39c, 1993]
65b. How satisfied are you with the authority you have to make decisions about what
Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q65C Satisfaction: Satisfaction with authority make other job decisions [d39b, 1993]
65c. How satisfied are you with the authority you have to make decisions about other....
Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q65D Satisfaction: Satisfaction with time available to advise students [d39d, 1993]
65d. How satisfied are you with the time available for working with students....
Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q65F Satisfaction: Satisfaction with quality of undergraduate students [d39e, 1993]
65f. How satisfied are you with the quality of undergraduate students whom you have
Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q65G Satisfaction: Satisfaction with quality of graduate students [d39f, 1993]
65g. How satisfied are you with the quality of graduate students whom you have taught....
Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q66A Satisfaction: Satisfaction with work load [d40a, 1993]
66a. How satisfied are you with your workload
Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q66B Satisfaction: Satisfaction with job security [d40h, 1993]
66b. How satisfied are you with your job security
Very dissatisfied

Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q66C Satisfaction: Satisfaction with advancement opportunity [*d40c, 1993*]

66c. How satisfied are you with opportunity for advancement in rank at this institution

Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q66D Satisfaction: Satisfaction with time to keep current in field [*d40d, 1993*]

66d. How satisfied are you with time available for keeping current in your field

Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q66F Satisfaction: Satisfaction with freedom to do outside consulting [*d40e, 1993*]

66f. How satisfied are you with freedom to do outside consulting

Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q66G Satisfaction: Satisfaction with salary [*d40f, 1993*]

66g. How satisfied are you with your salary

Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q66H Satisfaction: Satisfaction with benefits [*d40g, 1993*]

66h. How satisfied are you with your benefits, generally

Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q66I Satisfaction: Satisfaction with spouse employment opportunity [*d40h, 1993*]

66i. How satisfied are you with spouse or partner employment opportunities in this institution

Very dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Very satisfied

Q66J Satisfaction: Satisfaction with job overall [d40i, 1993]

66j. How satisfied are you with your job here, overall

Very dissatisfied

Somewhat dissatisfied

Somewhat satisfied

Very satisfied

Q67A Plans: How likely to accept part-time postsecondary job in 3 years [d41a, 1993]

67a. During the next three years, how likely are you to accept a part-time job at a different postsecondary institution?

Not at all likely

Somewhat likely

Very likely

Q67B Plans: How likely to accept full-time postsecondary job in 3 years [d41b, 1993]

67b. During the next three years, how likely are you to accept a full-time job at a different postsecondary institution?

Not at all likely

Somewhat likely

Very likely

Q67C Plans: How likely accept part-time nonpostsecondary job in 3 years [d41c, 1993]

67c. During the next three years, how likely are you to accept a part-time job not at a postsecondary institution?

Not at all likely

Somewhat likely

Very likely

Q67D Plans: How likely accept full-time nonpostsecondary job in 3 years [d41d, 1993]

67d. During the next three years, how likely are you to accept a full-time job not at a postsecondary institution?

Not at all likely

Somewhat likely

Very likely

Q67E Plans: How likely retire in 3 years [d41e, 1993]

67e. During the next three years, how likely are you to retire from the labor force?

Not at all likely

Somewhat likely

Very likely

Q68 Plans: Age stop working at postsecondary inst [d42, 1993]

68. At what age do you think you are most likely to stop working at a postsecondary institution?

Q69A Plans: If leave how important salary level *[d43a, 1993]*

69a. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Salary level

- Not important
- Somewhat important
- Very important

Q69B Plans: If leave how important tenure *[d43b, 1993]*

69b. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Tenure-track or tenured position

- Not important
- Somewhat important
- Very important

Q69C Plans: If leave how important job security *[d43c, 1993]*

69c. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Job security

- Not important
- Somewhat important
- Very important

Q69D Plans: If leave how important advancement opportunity *[d43d, 1993]*

69d. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Opportunities for advancement

- Not important
- Somewhat important
- Very important

Q69E Plans: If leave how important benefits *[d43e, 1993]*

69e. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Benefits

- Not important
- Somewhat important
- Very important

Q69F Plans: If leave how important no publishing pressure *[d43f, 1993]*

69f. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? No pressure to publish

- Not important

Somewhat important
Very important

Q69G Plans: If leave how important research facilities *[d43g, 1993]*

69g. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Good research facilities and equipment

Not important
Somewhat important
Very important

Q69H Plans: If leave how important instructional facilities *[d43h, 1993]*

69h. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Good instructional facilities and equipment

Not important
Somewhat important
Very important

Q69I Plans: If leave how important job for spouse *[d43i, 1993]*

69i. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Good job or job opportunities for your spouse or partner

Not important
Somewhat important
Very important
Not applicable

Q69J Plans: If leave how important geographic location *[d43j, 1993]*

69j. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Good geographic location

Not important
Somewhat important
Very important

Q69K Plans: If leave how important schools for children *[d43k, 1993]*

69k. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Good environment or schools for your children

Not important
Somewhat important
Very important
Not applicable

Q69L Plans: If leave how important teaching opportunity [d43l, 1993]

69l. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Greater opportunity to teach

- Not important
- Somewhat important
- Very important

Q69M Plans: If leave how important research opportunity [d43m, 1993]

69m. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? Greater opportunity to do research

- Not important
- Somewhat important
- Very important

Q70 Plans: If leave what would be the most important factor [no equiv, 1993]

70. Of the factors listed in Question 69, write in the letter of the item (a-m) that would be most important in your decision to leave.

Salary level

- Tenure-track or tenured position
- Job security
- Opportunities for advancement
- Benefits
- No pressure to publish
- Good research facilities and equip
- Good instruction facilities and equip
- Good job opportunities for spouse
- Good geographic location
- Good env: schools for your children
- Greater opportunity to teach
- Greater opportunity to do research
- None

Q71 Plans: Would you retire and work part-time at institution [d44, 1993]

71. If you could elect to draw on your retirement and still continue working at this institution on a part-time basis, would you do so?

- Yes
- No

Q72 Plans: Have you retired from another position [no equiv, 1993]

72. Have you retired from another position?

- Yes
- No

Q73 Plans: Would you take early retirement [d45, 1993]

73. If an early retirement option were offered to you at this institution, would you take it?

Yes

No

Q74 Plans: Age likely retire from all paid employment [d46, 1993]

74. At which age do you think you are most likely to retire from all paid employment?

Q76 A-U Income: Basic salary from institution [e47, 1993]

76a. How much compensation did you receive...

Note: NCES derived variables x04_76 (1999), x01E47(1993) and x03E47 (1993) were used for statistical analysis on this question.

Q79 Income: Total household income [e49, 1993]

79. For the 1998 calendar year, what was your total household income before taxes?

Q81 Demographics: Gender [f51, 1993]

81. Are you male or female?

Male

Female

Q82Y Demographics: Age, year of birth [f52, 1993]

82y. In what year were you born?

Note: NCES derived variables x02_82 (1999) and x02F52 (1993) were used for statistical analysis on this question.

Q83-84 Demographics: Race [f53, 1993]

84a. What is your race?

Note: NCES derived variables x03_84 (1999) and x02F53 (1993) were used for statistical analysis on this question.

Q87 Demographics: Marital status [f55, 1993]

87. What was your marital status in the 1998 Fall Term?

Single, never married

Married

Living in marriage-like relationship

Separated, divorced, or widowed

Q88 Demographics: Spouse/significant other employed in higher education [no equiv. 1993]

88. During the 1998 Fall Term, was your spouse or significant other employed in a professional position at a higher education institution?

Yes, at this institution

Yes, at other higher ed. institution

No

Q89 Demographics: Born in USA or other country [*f56a, 1993*]

89. In what country were you born?

USA

Other

Q90 Demographics: Citizenship [*f57a, 1993*]

90. What is your citizenship status?

United States citizen, native

United States citizen, naturalized

Permanent res. of the US (immigrant visa)

Temporary res. of US (non-immigrant visa)

APPENDIX B

NSOPF:93 Faculty Questionnaire

OMB No. 1850-0608
Expiration Date: 12/93

U.S. Department of Education
Office of Educational Research and Improvement

National Center for Education Statistics

1993 NATIONAL STUDY OF POSTSECONDARY FACULTY

*FACULTY
QUESTIONNAIRE*



All information on this form will be kept confidential and will not be disclosed or released to your institution or any other group or individual.

Co-sponsored by: National Science Foundation
National Endowment for the Humanities

Contractor: National Opinion Research Center (NORC)
University of Chicago
Mailing Address:
1525 East 55th Street
Chicago, Illinois 60615
Toll-Free Number: 1-800-733-NORC

NATIONAL STUDY OF POSTSECONDARY FACULTY
Instructions for Completing Faculty Questionnaire

Many of our questions ask about your activities during the 1992 Fall Term. By this, we mean whatever academic term was in progress on October 15, 1992.

All questions that ask about your position at "this institution" refer to your position during the 1992 Fall Term at the institution listed on the label on the back cover of the questionnaire.

This questionnaire was designed to be completed by both full-time and part-time instructional faculty and staff, and non-instructional faculty, in 2- and 4-year (and above) higher education institutions of all types and sizes. Please read each question carefully and follow all instructions. Some of the questions may not appear to fit your situation precisely; if you have a response other than those listed for a particular question, write in that response.

Most questions ask you to circle a number to indicate your response. Circle the number in front of your response and not the response itself. Other questions ask you to fill in information; write in the information in the space provided.

Mailing instructions for returning the completed questionnaire are on page 26.

If you have any questions on how to proceed, please call NORC toll-free at 1-800-733-NORC.

9. Which of the following best describes your academic rank, title, or position at this institution during the 1992 Fall Term? (CIRCLE ONE NUMBER, OR "NA")

NA. Not applicable: no ranks designated at this institution (SKIP TO QUESTION 11)

1. Professor
2. Associate Professor
3. Assistant Professor
4. Instructor
5. Lecturer
6. Other (WRITE IN) _____

10. In what year did you first achieve this rank?
(WRITE IN YEAR)

19

11. During the 1992 Fall Term, which of the following kinds of appointments did you hold at this institution?
(CIRCLE ALL THAT APPLY)

1. Acting
2. Affiliate or adjunct
3. Visiting
4. Assigned by religious order
5. Clinical
(WRITE IN TITLE OR POSITION) _____
6. Research
(WRITE IN TITLE OR POSITION) _____
7. None of the above

12. What is your principal field or discipline of teaching? (REFER TO THE LIST OF MAJOR FIELDS OF STUDY ON PAGES 5 AND 6 AND ENTER THE APPROPRIATE CODE NUMBER AND NAME BELOW. IF YOU HAVE NO FIELD OF TEACHING, CIRCLE "NA")

NA. Not Applicable

CODE FOR FIELD OR DISCIPLINE: _____ NAME OF PRINCIPAL FIELD/DISCIPLINE

13. What is your principal area of research? If equal areas, select one. (IF YOU HAVE NO RESEARCH AREA, CIRCLE "NA")

NA. Not Applicable

CODE FOR FIELD OR DISCIPLINE: _____ NAME OF PRINCIPAL FIELD/DISCIPLINE

CODES FOR MAJOR FIELDS OF STUDY AND ACADEMIC DISCIPLINES	
AGRICULTURE	
101	Agribusiness & Agricultural Production
102	Agricultural, Animal, Food, & Plant Sciences
103	Renewable Natural Resources, including Conservation, Fishing, & Forestry
110	Other Agriculture
ARCHITECTURE & ENVIRONMENTAL DESIGN	
121	Architecture & Environmental Design
122	City, Community, & Regional Planning
123	Interior Design
124	Land Use Management & Reclamation
130	Other Arch. & Environmental Design
ART	
141	Art History & Appreciation
142	Crafts
143	Dance
144	Design (other than Arch. or Interior)
145	Dramatic Arts
146	Film Arts
147	Fine Arts
148	Music
149	Music History & Appreciation
150	Other Visual & Performing Arts
BUSINESS	
161	Accounting
162	Banking & Finance
163	Business Administration & Management
164	Business Administrative Support (e.g., Bookkeeping, Office Management, Secretarial)
165	Human Resources Development
166	Organizational Behavior
167	Marketing & Distribution
170	Other Business
COMMUNICATIONS	
181	Advertising
182	Broadcasting & Journalism
183	Communications Research
184	Communication Technologies
190	Other Communications
COMPUTER SCIENCE	
201	Computer & Information Sciences
202	Computer Programming
203	Data Processing
204	Systems Analysis
210	Other Computer Science
EDUCATION	
221	Education, General
222	Basic Skills
223	Bilingual/Cross-cultural Education
224	Curriculum & Instruction
225	Education Administration
226	Education Evaluation & Research
227	Educational Psychology
228	Special Education
229	Student Counseling & Personnel Svcs.
230	Other Education
TEACHER EDUCATION	
241	Pro-Elementary
242	Elementary
243	Secondary
244	Adult & Continuing
245	Other General Teacher Ed. Programs
250	Teacher Education in Specific Subjects
ENGINEERING	
261	Engineering, General
262	Civil Engineering
263	Electrical, Electronics, & Communication Engineering
264	Mechanical Engineering
265	Chemical Engineering
270	Other Engineering
280	Engineering-Related Technologies
ENGLISH AND LITERATURE	
291	English, General
292	Composition & Creative Writing
293	American Literature
294	English Literature
295	Linguistics
296	Speech, Debate, & Forensics
297	English as a Second Language
300	English, Other

SECTION B. ACADEMIC/PROFESSIONAL BACKGROUND
--

14. Which of the following undergraduate academic honors or awards, if any, did you receive?
(CIRCLE ALL THAT APPLY)
- 1 National academic honor society, such as Phi Beta Kappa, Tau Beta Pi, or other field-specific national honor society
 - 2 Cum laude or honors
 - 3 Magna cum laude or high honors
 - 4 Summa cum laude or highest honors
 - 5 Other undergraduate academic achievement award
 - 6 None of the above
15. When you were in graduate school, which of the following forms of financial assistance, if any, did you receive?
(CIRCLE ALL THAT APPLY, OR CIRCLE "NA")
- NA. Not applicable; did not attend graduate school (GO TO QUESTION 16)
- 1 Teaching assistantship
 - 2 Research assistantship
 - 3 Program or residence hall assistantship
 - 4 Fellowship
 - 5 Scholarship or traineeship
 - 6 Grant
 - 7 G.I. Bill or other veterans' financial aid
 - 8 Federal or state loan
 - 9 Other loan
 - 10 None of the above

16. Please list below the degrees or other formal awards that you hold, the year you received each one, the field code (from pages 5-6) that applies, name of the field, and the name and location of the institution from which you received each degree or award. Do not list honorary degrees. (COMPLETE ALL COLUMNS FOR EACH DEGREE)

CODES FOR TYPE OF DEGREE	
1	Professional degree (M.D., D.D.S., L.L.B., etc.)
2	Doctoral degree (Ph.D., Ed.D., etc.)
3	Master's degree or equivalent
4	Bachelor's degree or equivalent
5	Certificate, diploma, or degree for completion of undergraduate program of more than 2 years but less than 4 years in length
6	Associate's degree or equivalent
7	Certificate, diploma, or degree for completion of undergraduate program of at least 1 year but less than 2 years in length

	A. Degree Code (see above)	B. Year Received	C. Field Code (from pp. 5-6)	D. Name of Field (from pp. 5-6)	E. Name of Institution (a) and City and State/Country of Institution (b)
(1) Highest	_____	19____	_____	_____	a. _____ _____
					b. _____ _____
(2) Next Highest	_____	19____	_____	_____	a. _____ _____
					b. _____ _____
(3) Next Highest	_____	19____	_____	_____	a. _____ _____
					b. _____ _____
(4) Next Highest	_____	19____	_____	_____	a. _____ _____
					b. _____ _____

17. During the 1992 Fall Term, were you employed only at this institution, or did you also have other employment including any outside consulting or other self-owned business, or private practice? (CIRCLE ONE NUMBER)

- 1 Employed only at this institution (SKIP TO QUESTION 19)
- 2 Had other employment, consulting, self-owned business, or private practice

17A. How many different jobs, other than your employment at this institution, did you have during the 1992 Fall Term? Include all outside consulting, self-owned business, and private practice. (WRITE IN NUMBER)

_____ Number of Jobs

18. Not counting any employment at this institution, what was the employment sector of the main other job you held during Fall 1992? (CIRCLE ONE NUMBER)

- 1 4-year college or university, graduate or professional school
- 2 2-year or other postsecondary institution
- 3 Elementary or secondary school
- 4 Consulting, freelance work, self-owned business, or private practice
- 5 Hospital or other health care or clinical setting
- 6 Foundation or other nonprofit organization other than health care organization
- 7 For-profit business or industry in the private sector
- 8 Federal government, including military, or state or local government
- 9 Other (WRITE IN) _____

18A. What year did you begin that job?
(WRITE IN YEAR)

19

18B. What was your primary responsibility in that job?
(CIRCLE ONE NUMBER)

- 1 Teaching
- 2 Research
- 3 Technical activities (e.g., programmer, technician, chemist, engineer, etc.)
- 4 Clinical service
- 5 Community/public service
- 6 Administration
- 7 Other

18C. Was that job full-time or part-time? (CIRCLE ONE NUMBER)

- 1 Full-time
- 2 Part-time

19. The next questions ask about jobs that ended before the beginning of the 1992 Fall Term. For the three most recent and significant main jobs that you held during the past 15 years, indicate below the year you began and the year you left each job, the employment sector, your primary responsibility, and whether you were employed full-time or part-time.

- Do not list promotions in rank at one place of employment as different jobs.
- Do not include temporary positions (i.e., summer positions) or work as a graduate student.
- List each job (other than promotion in rank) separately.

If not applicable, circle "NA" →		NA	NA	NA
(1)	YEARS JOB HELD	A. MOST RECENT MAIN JOB (PRIOR TO FALL 1992)	B. NEXT MOST RECENT MAIN JOB	C. NEXT MOST RECENT MAIN JOB
	FROM: TO:	19 ____ 19 ____	19 ____ 19 ____	19 ____ 19 ____
(2)	EMPLOYMENT SECTOR	(CIRCLE ONE)	(CIRCLE ONE)	(CIRCLE ONE)
	4-year college or university, graduate or professional school	1	1	1
	2-year or other postsecondary institution	2	2	2
	Elementary or secondary school	3	3	3
	Consulting, freelance work, self-owned business, or private practice	4	4	4
	Hospital or other health care or clinical setting	5	5	5
	Foundation or other nonprofit organization other than health care organization	6	6	6
	For-profit business or industry in the private sector	7	7	7
	Federal government, including military, or state or local government	8	8	8
	Other	9	9	9
(3)	PRIMARY RESPONSIBILITY	(CIRCLE ONE)	(CIRCLE ONE)	(CIRCLE ONE)
	Teaching	1	1	1
	Research	2	2	2
	Technical activities (e.g., programmer, technician, chemist, engineer, etc.)	3	3	3
	Clinical service	4	4	4
	Community/public service	5	5	5
	Administration	6	6	6
Other	7	7	7	
(4)	FULL-TIME/PART-TIME	(CIRCLE ONE)	(CIRCLE ONE)	(CIRCLE ONE)
	Full-time Part-time	1 2	1 2	1 2

20. About how many of each of the following have you presented/published/etc. during your entire career and during the last 2 years? For publications, please include only works that have been accepted for publication. Count multiple presentations/publications of the same work only once. (CIRCLE "NA" IF YOU HAVE NOT PUBLISHED OR PRESENTED)

NA No presentations/publications/etc. (GO TO QUESTION 21)

(WRITE IN A NUMBER ON EACH LINE. IF NONE, WRITE IN "0")

Type of Presentation/Publication/etc.	A. Total during career	B. Number in past 2 years
(1) Articles published in refereed professional or trade journals	_____	_____
(2) Articles published in nonrefereed professional or trade journals	_____	_____
(3) Creative works published in juried media	_____	_____
(4) Creative works published in nonjuried media or in-house newsletters	_____	_____
(5) Published reviews of books, articles, or creative works	_____	_____
(6) Chapters in edited volumes	_____	_____
(7) Textbooks	_____	_____
(8) Other books	_____	_____
(9) Monographs	_____	_____
(10) Research or technical reports disseminated internally or to clients	_____	_____
(11) Presentations at conferences, workshops, etc.	_____	_____
(12) Exhibitions or performances in the fine or applied arts	_____	_____
(13) Patents or copyrights (excluding thesis or dissertation)	_____	_____
(14) Computer software products	_____	_____

SECTION C. INSTITUTIONAL RESPONSIBILITIES AND WORKLOAD
--

21. During the 1992 Fall Term, how many undergraduate or graduate thesis or dissertation committees, comprehensive exams, orals committees, or examination or certification committees did you chair and/or serve on at this institution? (CIRCLE "NA" IF YOU DID NOT SERVE ON ANY COMMITTEES)

NA Did not serve on any undergraduate or graduate committees (GO TO QUESTION 22)

(WRITE IN A NUMBER ON EACH LINE, IF NONE, WRITE IN "0")

Type of Committee	A. Number served on	B. Of that number, how many did you chair?
(1) <u>Undergraduate</u> thesis or dissertation committees	_____	_____
(2) <u>Undergraduate</u> comprehensive exams or orals committees (other than as part of thesis/dissertation committees)	_____	_____
(3) <u>Undergraduate</u> examination/certification committees	_____	_____
(4) <u>Graduate</u> thesis or dissertation committees	_____	_____
(5) <u>Graduate</u> comprehensive exams or orals committees (other than as part of thesis/dissertation committees)	_____	_____
(6) <u>Graduate</u> examination/certification committees	_____	_____

22. During the 1992 Fall Term, what was the total number of classes or sections you taught at this institution? Do not include individualized instruction, such as independent study or individual performance classes. Count multiple sections of the same course as a separate class, but not the lab section of a course. (WRITE IN A NUMBER, OR CIRCLE "0")

0 No classes taught (SKIP TO QUESTION 25)

_____ Number of classes/sections (ANSWER 22A)

22A. How many of those classes were classes for credit?

0 No classes for credit (SKIP TO QUESTION 25)

_____ Number of classes/sections for credit (ANSWER QUESTION 23 ON THE NEXT PAGE)

23. For each class or section that you taught for credit at this institution during the 1992 Fall Term, please answer the following items. Do not include individualized instruction, such as independent study or individual one-on-one performance classes.

If you taught multiple sections of the same course, count them as separate classes, but do not include the lab section of the course as a separate class. For each class, enter the code for the academic discipline of the class. (Refer to pages 5-6 for the codes. Please enter the code rather than the course name.)

	A.	B.
	FIRST FOR-CREDIT CLASS	SECOND FOR-CREDIT CLASS
(1) CODE FOR ACADEMIC DISCIPLINE OF CLASS (from pp. 5-6)	<input type="text"/>	<input type="text"/>
(2) DURING 1992 FALL TERM		
Number of weeks the class met?	a _____	a _____
Number of credit hours?	b _____	b _____
Number of hours the class met per week?	c _____	c _____
Number of teaching assistants, readers?	d _____	d _____
Number of students enrolled?	e _____	e _____
Was this class team taught?	f 1 Yes 2 No	f 1 Yes 2 No
Average # hours per week you taught the class?	g _____	g _____
(3) PRIMARY LEVEL OF STUDENTS	(CIRCLE ONE)	(CIRCLE ONE)
Lower division students (first or second year postsecondary) <u>or</u>	1	1
Upper division students (third or fourth year postsecondary) <u>or</u>	2	2
Graduate or any other post-baccalaureate students, <u>or</u>	3	3
All other students?	4	4
(4) PRIMARY INSTRUCTIONAL METHOD USED	(CIRCLE ONE)	(CIRCLE ONE)
Lecture	1	1
Seminar	2	2
Discussion group or class presentations	3	3
Lab, clinic or problem session	4	4
Apprenticeship, internship, field work, or field trips	5	5
Role playing, simulation, or other performance (e.g., art, music, drama)	6	6
TV or radio	7	7
Group projects	8	8
Cooperative learning groups	9	9

C.	D.	E.	
THIRD FOR-CREDIT CLASS	FOURTH FOR-CREDIT CLASS	FIFTH FOR-CREDIT CLASS	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
a _____	a _____	a _____	a. Number of weeks the class met
b _____	b _____	b _____	b. Number of credit hours
c _____	c _____	c _____	c. Number of hours the class met per week
d _____	d _____	d _____	d. Number of teaching assistants, readers
e _____	e _____	e _____	e. Number of students enrolled
f 1. Yes 2. No	f. 1. Yes 2. No	f. 1. Yes 2. No	f. Was this class team taught
g _____	g _____	g _____	g. Average # hours per week you taught
(CIRCLE ONE)	(CIRCLE ONE)	(CIRCLE ONE)	
1	1	1	Lower division students
2	2	2	Upper division students
3	3	3	Graduate, post-baccalaureate students
4	4	4	All other students
(CIRCLE ONE)	(CIRCLE ONE)	(CIRCLE ONE)	
1	1	1	Lecture
2	2	2	Seminar
3	3	3	Discussion group or class presentations
4	4	4	Lab, clinic or problem session
5	5	5	Apprenticeship, internship, etc.
6	6	6	Role playing, simulation, performance, etc.
7	7	7	TV or radio
8	8	8	Group projects
9	9	9	Cooperative learning groups

29. How would you describe your primary professional research, writing, or creative work during the 1992 Fall Term? (CIRCLE ONE NUMBER)

- 1 Pure or basic research
- 2 Applied research
- 3 Policy-oriented research or analysis
- 4 Literary or expressive
- 5 Program/Curriculum design and development
- 6 Other

30. During the 1992 Fall Term, were you engaged in any funded research or funded creative endeavors? Include any grants, contracts, or institutional awards. Do not include consulting services. (CIRCLE ONE NUMBER)

- 1. Yes
- 2. No (SKIP TO QUESTION 34)

31. During the 1992 Fall Term, were you a principal investigator (PI) or co-principal investigator (Co-PI) for any grants or contracts? (CIRCLE ONE NUMBER)

- 1. Yes
- 2. No (SKIP TO QUESTION 33)

32. During the 1992 Fall Term, how many individuals other than yourself were supported by all the grants and contracts for which you were PI or Co-PI? (WRITE IN NUMBER, IF NONE, WRITE IN "0")

_____ Number of individuals

33. Fill out the information below for each funding source during the 1992 Fall Term. If not sure, give your best estimate.

A. Funding source (CIRCLE "1" OR "2" FOR EACH SOURCE)	B. Number of Grants/Contracts	C. Work done as... (CIRCLE ALL THAT APPLY)	D. Total funds for 1992-93 academic year	E. How funds were used (CIRCLE ALL THAT APPLY)
(1) This institution? 1 Yes → 2 No	_____	1 PI 2 Co-PI 3 Staff	\$ _____	1 Research 2 Program/curriculum development 3 Other
(2) Foundation or other nonprofit organization? 1 Yes → 2 No	_____	1 PI 2 Co-PI 3 Staff	\$ _____	1 Research 2 Program/curriculum development 3 Other
(3) For profit business or industry in the private sector? 1 Yes → 2 No	_____	1 PI 2 Co-PI 3 Staff	\$ _____	1 Research 2 Program/curriculum development 3 Other
(4) State or local government? 1 Yes → 2 No	_____	1 PI 2 Co-PI 3 Staff	\$ _____	1 Research 2 Program/curriculum development 3 Other
(5) Federal Government? 1 Yes → 2 No	_____	1 PI 2 Co-PI 3 Staff	\$ _____	1 Research 2 Program/curriculum development 3 Other
(6) Other source? (WRITE IN) _____ 1 Yes → 2 No	_____	1 PI 2 Co-PI 3 Staff	\$ _____	1 Research 2 Program/curriculum development 3 Other

34. How would you rate each of the following facilities or resources at this institution that were available for your own use during the 1992 Fall Term? (CIRCLE ONE NUMBER, OR "NA," ON EACH LINE)

Not Available/ Not Applicable	Very Poor	Poor	Good	Very Good	
NA	1	2	3	4	a Basic research equipment/instruments
NA	1	2	3	4	b Laboratory space and supplies
NA	1	2	3	4	c Availability of research assistants
NA	1	2	3	4	d Personal computers
MA	1	2	3	4	e Centralized (main frame) computer facilities
NA	1	2	3	4	f Computer networks with other institutions
NA	1	2	3	4	g Audio-visual equipment
NA	1	2	3	4	h Classroom space
NA	1	2	3	4	i Office space
NA	1	2	3	4	j Studio/performance space
NA	1	2	3	4	k Secretarial support
NA	1	2	3	4	l Library holdings

35. Listed below are some ways that institutions and departments may use internal funds for the professional development of faculty.

A. Was institutional or department funding available for your use during the past two years for ...	B. Did you use any of those funds at this institution?	C. Were those funds adequate for your purposes?
(1) tuition remission at this or other institutions? 1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No
(2) professional association memberships and/or registration fees? 1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No
(3) professional travel? 1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No
(4) training to improve research or teaching skills? 1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No
(5) retraining for fields in higher demand? 1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No
(6) sabbatical leave? 1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No

36. On the average, how many hours per week did you spend at each of the following kinds of activities during the 1992 Fall Term? (IF NOT SURE, GIVE YOUR BEST ESTIMATES)

Average number hours per week during the 1992 Fall Term

- _____ a. All paid activities at this institution (teaching, research, administration, etc.)
- _____ b. All unpaid activities at this institution
- _____ c. Any other paid activities outside this institution (e.g., consulting, working on other jobs)
- _____ d. Unpaid (pro bono) professional service activities outside this institution

37. In column A, we ask you to allocate your total work time in the Fall of 1992 (as reported in Question 36) into several categories. We realize that they are not mutually exclusive categories (e.g., research may include teaching; preparing a course may be part of professional growth). We ask, however, that you allocate as best you can the proportion of your time spent in activities whose primary focus falls within the indicated categories. In column B, indicate what percentage of your time you would prefer to spend in each of the listed categories.

A. % of Work Time Spent	(WRITE IN A PERCENTAGE ON EACH LINE IF NOT SURE, GIVE YOUR BEST ESTIMATE. IF NONE, WRITE IN "0")	B. % of Work Time Preferred
_____ %	a. Teaching (including teaching, grading papers, preparing courses; developing new curricula; advising or supervising students, working with student organizations or intramural athletics)	_____ %
_____ %	b. Research/Scholarship (including research; reviewing or preparing articles or books; attending or preparing for professional meetings or conferences; reviewing proposals; seeking outside funding; giving performances or exhibitions in the fine or applied arts, or giving speeches)	_____ %
_____ %	c. Professional Growth (including taking courses, pursuing an advanced degree; other professional development activities, such as practice or activities to remain current in your field)	_____ %
_____ %	d. Administration	_____ %
_____ %	e. Outside Consulting or Freelance Work	_____ %
_____ %	f. Service/Other Non-Teaching Activities (including providing legal or medical services or psychological counseling to clients or patients; paid or unpaid community or public service, service to professional societies/associations; other activities or work not listed in a-e)	_____ %
100%	PLEASE BE SURE THAT THE PERCENTAGES YOU PROVIDE ADD UP TO 100% OF THE TOTAL TIME.	100%

38. Are you a member of the union (or other bargaining association) that represents faculty at this institution?

1. Union is available, but I am not eligible
2. I am eligible, but not a member
3. I am eligible, and a member
4. Union is not available at this institution

SECTION D. JOB SATISFACTION ISSUES

39. How satisfied or dissatisfied are you with each of the following aspects of your instructional duties at this institution? (CIRCLE "NA" IF YOU HAD NO INSTRUCTIONAL DUTIES)

NA. No instructional duties (GO TO QUESTION 40)

(CIRCLE ONE NUMBER FOR EACH ITEM; IF AN ITEM DOES NOT APPLY TO YOU, WRITE IN "NA" NEXT TO THE ITEM)

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	
1	2	3	4	a. The authority I have to make decisions about content and methods in the courses I teach
1	2	3	4	b. The authority I have to make decisions about other (non-instructional) aspects of my job
1	2	3	4	c. The authority I have to make decisions about what courses I teach
1	2	3	4	d. Time available for working with students as an advisor, mentor, etc.
1	2	3	4	e. Quality of undergraduate students whom I have taught here
1	2	3	4	f. Quality of graduate students whom I have taught here

40. How satisfied or dissatisfied are you with the following aspects of your job at this institution? (CIRCLE ONE NUMBER FOR EACH ITEM)

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	
1	2	3	4	a. My work load
1	2	3	4	b. My job security
1	2	3	4	c. Opportunity for advancement in rank at this institution
1	2	3	4	d. Time available for keeping current in my field
1	2	3	4	e. Freedom to do outside consulting
1	2	3	4	f. My salary
1	2	3	4	g. My benefits, generally
1	2	3	4	h. Spouse or partner employment opportunities in this geographic area
1	2	3	4	i. My job here, overall

41. During the next three years, how likely is it that you will leave this job to . . .
(CIRCLE ONE NUMBER FOR EACH ITEM)

Not At All Likely	Somewhat Likely	Very Likely	
1	2	3	a. accept a <u>part-time</u> job at a <u>different</u> postsecondary institution?
1	2	3	b. accept a <u>full-time</u> job at a <u>different</u> postsecondary institution?
1	2	3	c. accept a <u>part-time</u> job <u>not at a</u> postsecondary institution?
1	2	3	d. accept a <u>full-time</u> job <u>not at a</u> postsecondary institution?
1	2	3	e. retire from the labor force?

42. At what age do you think you are most likely to stop working at a postsecondary institution?
(WRITE IN AGE, OR CIRCLE "DK")

_____ Years of age

DK. Don't know

43. If you were to leave your current position in academia to accept another position inside or outside of academia, how important would each of the following be in your decision? (CIRCLE ONE NUMBER FOR EACH ITEM)

Not Important	Somewhat Important	Very Important	
1	2	3	a. Salary level
1	2	3	b. Tenure-track/tenured position
1	2	3	c. Job security
1	2	3	d. Opportunities for advancement
1	2	3	e. Benefits
1	2	3	f. No pressure to publish
1	2	3	g. Good research facilities and equipment
1	2	3	h. Good instructional facilities and equipment
1	2	3	i. Good job or job opportunities for my spouse or partner
1	2	3	j. Good geographic location
1	2	3	k. Good environment/schools for my children
1	2	3	l. Greater opportunity to teach
1	2	3	m. Greater opportunity to do research
1	2	3	n. Greater opportunity for administrative responsibilities

44. If you could elect to draw on your retirement and still continue working at your institution on a part-time basis, would you do so? (CIRCLE ONE)

1 Yes

2 No

DK Don't know

45. If an early retirement option were offered to you at your institution, would you take it? (CIRCLE ONE)

1 Yes

2 No

DK Don't know

46. At which age do you think you are most likely to retire from all paid employment? (WRITE IN AGE, OR CIRCLE "DK")

_____ Years of age

DK Don't know

SECTION E. COMPENSATION

Note: Your responses to these items as with all other items in this questionnaire are voluntary and strictly confidential. They will be used only in statistical summaries, and will not be disclosed to your institution or to any individual or group. Furthermore, all information that would permit identification of individuals or institutions will be removed from the survey files.

47. For the calendar year 1992, estimate your gross compensation before taxes from each of the sources listed below.

(IF NOT SURE, GIVE YOUR BEST ESTIMATES; IF NO COMPENSATION FROM A SOURCE, WRITE IN "0")

Compensation from this institution:

- \$ _____ a. Basic salary → b. Type of appointment (e.g., 9 months) # of months
- \$ _____ c. Other teaching at this institution not included in basic salary (e.g., for summer session)
- \$ _____ d. Supplements not included in basic salary (for administration, research, coaching sports, etc.)
- \$ _____ e. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)
- \$ _____ f. Any other income from this institution

Compensation from other sources:

- \$ _____ g. Employment at another academic institution
- \$ _____ h. Legal or medical services or psychological counseling
- \$ _____ i. Outside consulting, consulting business or freelance work
- \$ _____ j. Self-owned business (other than consulting)
- \$ _____ k. Professional performances or exhibitions
- \$ _____ l. Speaking fees, honoraria
- \$ _____ m. Royalties or commissions
- \$ _____ n. Any other employment
- \$ _____ o. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)

Other sources of earned income (WRITE IN BELOW):

- \$ _____ p. _____
- \$ _____ q. _____

48. For the calendar year 1992, how many persons were in your household including yourself?

_____ Total number in household

49. For the calendar year 1992, what was your total household income?

\$ _____ Total household income

50. For the calendar year 1992, how many dependents did you have? Do not include yourself. (A dependent is someone receiving at least half of his or her support from you.)

_____ Number of dependents

SECTION F. SOCIODEMOGRAPHIC CHARACTERISTICS

51. Are you . . .

1. male, or
2. female?

52. In what month and year were you born?
(WRITE IN MONTH AND YEAR)

		19		
MONTH			YEAR	

53. What is your race? (CIRCLE ONE NUMBER)

1. American Indian or Alaskan Native
2. Asian or Pacific Islander (ANSWER 53A)
3. African American/Black
4. White
5. Other (WRITE IN BELOW)

—• 53A. What is your Asian or Pacific Islander origin? If more than one, circle the one you consider the most important part of your background. (CIRCLE ONE NUMBER)

1. Chinese
2. Filipino
3. Japanese
4. Korean
5. Southeast Asian (Vietnamese, Laotian, Cambodian/Kampuchean, etc.)
6. Pacific Islander
7. Other (WRITE IN BELOW)

54. Are you of Hispanic descent?
(CIRCLE ONE NUMBER)

1. Yes (ANSWER 54A)
 2. No (SKIP TO QUESTION 55)
- 54A. What is your Spanish/Hispanic origin? If more than one, circle the one you consider the most important part of your background.

1. Mexican, Mexican-American, Chicano
2. Cuban, Cubano
3. Puerto Rican, Puertorriqueno, or Bouricuan
4. Other (WRITE IN BELOW)

(SKIP TO QUESTION 55)

55. What is your current marital status?
(CIRCLE ONE NUMBER)

1. Single, never married
2. Married
3. Living with someone in a marriage-like relationship
4. Separated
5. Divorced
6. Widowed

56. In what country were you born?
(CIRCLE ONE NUMBER)

1. USA
2. Other (WRITE IN) _____

57. What is your citizenship status?
(CIRCLE ONE NUMBER)

1. United States citizen, native
2. United States citizen, naturalized
3. Permanent resident of the United States (immigrant visa)

COUNTRY OF PRESENT CITIZENSHIP

4. Temporary resident of United States (non-immigrant visa)

COUNTRY OF PRESENT CITIZENSHIP

58. What is the highest level of formal education completed by your mother and your father?
(CIRCLE ONE FOR EACH PERSON)

A.		B.	
Mother	Father		
1	1	a.	Less than high school diploma
2	2	b.	High school diploma
3	3	c.	Some college
4	4	d.	Associate's degree
5	5	e.	Bachelor's degree
6	6	f.	Master's degree
7	7	g.	Doctorate or professional degree (e.g., Ph.D., M.D., D.V.M., J.D./L.L.B.)
8	8	h.	Other
DK	DK	i.	Don't know

59. Please indicate the extent to which you agree or disagree with each of the following statements.
(CIRCLE ONE NUMBER FOR EACH STATEMENT)

Disagree Strongly	Disagree Somewhat	Agree Somewhat	Agree Strongly	
1	2	3	4	a. Teaching effectiveness should be the primary criterion for promotion of college teachers at this institution.
1	2	3	4	b. Research/publications should be the primary criterion for promotion of college teachers at this institution.
1	2	3	4	c. At this institution, research is rewarded more than teaching
1	2	3	4	d. State or federally mandated assessment requirements will improve the quality of undergraduate education.
1	2	3	4	e. Female faculty members are treated fairly at this institution.
1	2	3	4	f. Faculty who are members of racial or ethnic minorities are treated fairly at this institution.
1	2	3	4	g. If I had it to do over again, I would still choose an academic career.

60. Please indicate your opinion regarding whether each of the following has worsened, stayed the same, or improved in recent years at this institution. (CIRCLE ONE FOR EACH ITEM)

Worsened	Stayed the Same	Improved	Don't Know	
1	2	3	DK	a. The quality of students who choose to pursue academic careers in my field
1	2	3	DK	b. The opportunities junior faculty have for advancement in my field
1	2	3	DK	c. The professional competence of individuals entering my academic field
1	2	3	DK	d. The ability of this institution to meet the educational needs of entering students
1	2	3	DK	e. The ability of faculty to obtain external funding
1	2	3	DK	f. Pressure to increase faculty workload at this institution
1	2	3	DK	g. The quality of undergraduate education at this institution
1	2	3	DK	h. The atmosphere for free expression of ideas
1	2	3	DK	i. The quality of research at this institution

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Return this completed questionnaire in the enclosed prepaid envelope to:

**National Opinion Research Center (NORC)
University of Chicago
1525 East 55th Street
Chicago, Illinois 60615**

APPENDIX C

NSOPF:99 Faculty Questionnaire

OMB Clearance No 1850-0608
Expiration Date: 2/28/2001

**U.S. Department of Education
Office of Educational Research and Improvement**

National Center for Education Statistics

***1999 NATIONAL STUDY OF
POSTSECONDARY FACULTY***

FACULTY QUESTIONNAIRE



*All information that would permit
identification of individuals will be kept confidential.*

Sponsored by: National Center for Education Statistics

Supported by: National Science Foundation
National Endowment for the Humanities

Contractor: The Gallup Organization
Government & Education Division

Mailing Address: The Gallup Organization
Survey Processing Center
P.O. Box 5700
Lincoln, Nebraska 68505-9926

Survey Contact: Brian Kuhr
E-mail: NSOPF99@gallup.com
Toll-Free Number: 1-800-633-0209

INSTRUCTIONS

General Instructions. Many of our questions ask about your activities during the 1998 Fall Term. By this, we mean whatever academic term that was in progress on November 1, 1998.

All questions that ask about your position at "this institution" refer to your position during the 1998 Fall Term at the institution listed on the label on the back cover of the questionnaire.

This questionnaire was designed to be completed by both full-time and part-time faculty and instructional staff, in 2- and 4-year (and above) higher education institutions of all types and sizes. If you are a research assistant or a teaching assistant, please note this on the cover of the questionnaire and return it without completing the questionnaire.

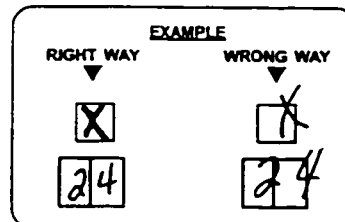
Electronic questionnaire. This questionnaire is available on the World Wide Web (WWW). We strongly urge you to use the electronic version because it is user friendly and takes less time to complete than the paper version. To access the WWW version of the questionnaire, go to <http://www.faculty.gallup.com>. Your individual Personal Identification Number (PIN) is on the label on the back of the questionnaire.

Returning the questionnaire. Mailing instructions for returning the completed questionnaire appear on the last page of the questionnaire.

Questions. If you have any questions about the study, please contact Brian Kuhr of The Gallup Organization toll-free at 1-800-633-0209 or via e-mail at NSOPF99@gallup.com.

Survey Instructions. This is a scannable questionnaire. Please follow the steps below carefully when completing this questionnaire. It will make it easier to read your results.

- Use a blue or black ink pen only.
- Do not use ink that soaks through the paper.
- Make solid marks that fit in the response boxes.
- To answer the survey questions, please mark the appropriate answer in each box.



ASSURANCE OF CONFIDENTIALITY

All information that permits the identification of individuals will be kept strictly confidential. Individual responses, and all responses that permit the identification of individuals, will be protected by the National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 *et seq.*], the Carl D. Perkins Vocational Education Act, and the Privacy Act of 1974 [5 U.S.C. 552a].

SECTION A: NATURE OF EMPLOYMENT										
<p>1. During the 1998 Fall Term, did you have any instructional duties at this institution (e.g., teaching one or more courses, or advising or supervising students' academic activities)? (Mark [x] one box.)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No (SKIP TO QUESTION 3)</p> <p>2. During the 1998 Fall Term, were ... (Mark [x] one box.)</p> <p><input type="checkbox"/> all of your instructional duties related to credit courses, or advising or supervising academic activities for which students received credit</p> <p><input type="checkbox"/> some of your instructional duties related to credit courses or advising or supervising academic activities for which students received credit</p> <p style="text-align: center;">OR</p> <p><input type="checkbox"/> all of your instructional duties related to noncredit courses or advising or supervising noncredit academic activities</p> <p>3. What was your <i>principal</i> activity at this institution during the 1998 Fall Term? If you had equal responsibilities, please select one. (Mark [x] one box.)</p> <p><input type="checkbox"/> Teaching</p> <p><input type="checkbox"/> Research</p> <p><input type="checkbox"/> Clinical service</p> <p><input type="checkbox"/> Administration (Write in title or position.)</p> <div style="border: 1px solid black; height: 15px; width: 250px; margin-left: 20px;"></div> <p><input type="checkbox"/> On sabbatical from this institution</p> <p><input type="checkbox"/> Other activity (e.g., technical activity such as programmer or technician; other institutional activities such as library services, community/public service; subsidized performer, artist-in-residence, etc.)</p> <p>4. During the 1998 Fall Term, did you have faculty status at this institution? (Mark [x] one box.)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>	<p>5. During the 1998 Fall Term, did this institution consider you to be employed part-time or full-time? (Mark [x] one box.)</p> <p><input type="checkbox"/> Part-time</p> <p><input type="checkbox"/> Full-time (SKIP TO QUESTION 7)</p> <p>6. Did you hold a part-time position at this institution during the 1998 Fall Term because... (Mark [x] "Yes" or "No" for each item)</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">Yes ▼</th> <th style="width: 10%; text-align: center;">No ▼</th> </tr> </thead> <tbody> <tr> <td>a. You preferred working on a part-time basis?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>b. A full-time position was not available?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table> <p>7. In what year did you begin the job you held at this institution during the 1998 Fall Term? Consider promotions in rank as part of the same job. (Write in year.)</p> <div style="border: 1px solid black; display: inline-block; padding: 2px;">19</div> <p>8. Which of the following best describes your academic rank, title, or position at this institution during the 1998 Fall Term? (Mark [x] one box. If no ranks are designated at your institution, mark the "NA," Not Applicable box.)</p> <p><input type="checkbox"/> NA. Not applicable: no ranks designated at this institution (SKIP TO QUESTION 10, PAGE 2)</p> <p><input type="checkbox"/> Professor</p> <p><input type="checkbox"/> Associate Professor</p> <p><input type="checkbox"/> Assistant Professor</p> <p><input type="checkbox"/> Instructor</p> <p><input type="checkbox"/> Lecturer</p> <p><input type="checkbox"/> Other title (Please specify below.)</p> <div style="border: 1px solid black; height: 15px; width: 250px; margin-left: 20px;"></div> <p>9. In what year did you first achieve this rank/title? (Write in year.)</p> <div style="border: 1px solid black; display: inline-block; padding: 2px;">19</div>		Yes ▼	No ▼	a. You preferred working on a part-time basis?	<input type="checkbox"/>	<input type="checkbox"/>	b. A full-time position was not available?	<input type="checkbox"/>	<input type="checkbox"/>
	Yes ▼	No ▼								
a. You preferred working on a part-time basis?	<input type="checkbox"/>	<input type="checkbox"/>								
b. A full-time position was not available?	<input type="checkbox"/>	<input type="checkbox"/>								

10. What was your tenure status at this institution during the 1998 Fall Term? (Mark [x] one box.)

Tenured → In what year did you achieve tenure at this institution? (Write in year.)

19

On tenure track but not tenured

Not on tenure track/although institution has a tenure system

No tenure system at this institution

11. During the 1998 Fall Term, what was the duration of your contract or appointment at this institution? (Mark [x] one box.)

Unspecified duration, or tenured

One academic term

One academic year or one calendar year

Two or more academic/calendar years

Other

12. During the 1998 Fall Term, did you hold any of the following kinds of appointments at this institution? (Mark [x] "Yes" or "No" for each item.)

	Yes ▼	No ▼
a. Acting	<input type="checkbox"/>	<input type="checkbox"/>
b. Affiliate or adjunct	<input type="checkbox"/>	<input type="checkbox"/>
c. Visiting	<input type="checkbox"/>	<input type="checkbox"/>
d. Assigned by religious order	<input type="checkbox"/>	<input type="checkbox"/>
e. Clinical (Write in title or position.) _____	<input type="checkbox"/>	<input type="checkbox"/>
f. Research (Write in title or position.) _____	<input type="checkbox"/>	<input type="checkbox"/>
g. Postdoctoral	<input type="checkbox"/>	<input type="checkbox"/>
h. Other (Please specify below) _____	<input type="checkbox"/>	<input type="checkbox"/>

13. Were you chairperson of a department or division at this institution during the 1998 Fall Term? (Mark [x] one box.)

Yes

No

14. What is your principal field or discipline of teaching? If equal areas, select one. (Write in the name of your principal field or discipline and enter the code number of the discipline, on pages 3-4, that best matches your field of teaching. If you have no field of teaching, mark [x] the "NA" box.)

NA. Not Applicable (SKIP TO QUESTION 15)

Name of principal field/discipline of teaching

____ Code for Field or Discipline

15. What is your principal area of research? If equal areas, select one. (Write in the name of your principal area of research and enter the code number of the discipline, on pages 3-4, that best matches your field of research. If you have no research area, mark [x] the "NA" box.)

NA. Not Applicable (SKIP TO QUESTION 16, PAGE 5)

Name of principal field/discipline of research

____ Code for Field or Discipline

**CODES FOR MAJOR FIELDS OF
STUDY AND ACADEMIC DISCIPLINES**

<p>AGRICULTURE</p> <p>101 Agribusiness & Agricultural Production 102 Agricultural, Animal, Food, & Plant Sciences 103 Renewable Natural Resources, including Conservation, Fishing, & Forestry 110 Other Agriculture</p> <p>ARCHITECTURE & ENVIRONMENTAL DESIGN</p> <p>121 Architecture & Environmental Design 122 City, Community, & Regional Planning 123 Interior Design 124 Land Use Management & Reclamation 130 Other Arch. & Environmental Design</p> <p>ART</p> <p>141 Art History & Appreciation 142 Crafts 143 Dance 144 Design (other than Architecture or Interior) 145 Dramatic Arts 146 Film Arts 147 Fine Arts 148 Music 149 Music History & Appreciation 150 Other Visual & Performing Arts</p> <p>BUSINESS</p> <p>161 Accounting 162 Banking & Finance 163 Business Administration & Management 164 Business Administrative Support (e.g., Bookkeeping, Office Management, Secretarial) 165 Human Resources Development 166 Organizational Behavior 167 Marketing & Distribution 170 Other Business</p> <p>COMMUNICATIONS</p> <p>181 Advertising 182 Broadcasting & Journalism 183 Communications Research 184 Communication Technologies 190 Other Communications</p> <p>COMPUTER SCIENCE</p> <p>201 Computer & Information Sciences 202 Computer Programming 203 Data Processing 204 Systems Analysis 210 Other Computer Science</p> <p>EDUCATION</p> <p>221 Education, General 222 Basic Skills 223 Bilingual/Cross-cultural Education 224 Curriculum & Instruction 225 Education Administration 226 Education Evaluation & Research 227 Educational Psychology 228 Higher Education 229 Special Education 230 Student Counseling & Personnel Services 231 Other Education</p>	<p>TEACHER EDUCATION</p> <p>241 Pre-Elementary 242 Elementary 243 Secondary 244 Adult & Continuing 245 Other General Teacher Education Programs 250 Teacher Education in Specific Subjects</p> <p>ENGINEERING</p> <p>261 Engineering, General 262 Civil Engineering 263 Electrical, Electronics, & Communication Engineering 264 Mechanical Engineering 265 Chemical Engineering 270 Other Engineering 280 Engineering-Related Technologies</p> <p>ENGLISH & LITERATURE</p> <p>291 English, General 292 Composition & Creative Writing 293 American Literature 294 English Literature 295 Linguistics 296 Speech, Debate, & Forensics 297 English as a Second Language 300 English, Other</p> <p>FOREIGN LANGUAGES</p> <p>311 Chinese (Mandarin, Cantonese, or Other Chinese) 312 French 313 German 314 Italian 315 Latin 316 Japanese 317 Other Asian 318 Russian or Other Slavic 319 Spanish 320 Other Foreign Languages</p> <p>HEALTH SCIENCES</p> <p>331 Allied Health Technologies & Services 332 Dentistry 333 Health Services Administration 334 Medicine, including Psychiatry 335 Nursing 336 Pharmacy 337 Public Health 338 Veterinary Medicine 340 Other Health Sciences</p> <p>350 HOME ECONOMICS</p> <p>360 INDUSTRIAL ARTS</p> <p>370 LAW</p> <p>380 LIBRARY & ARCHIVAL SCIENCES</p>
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(CONTINUED)

<p>390 MATHEMATICS/STATISTICS</p> <p>NATURAL SCIENCES: BIOLOGICAL SCIENCES</p> <p>391 Biochemistry</p> <p>392 Biology</p> <p>393 Botany</p> <p>394 Genetics</p> <p>395 Immunology</p> <p>396 Microbiology</p> <p>397 Physiology</p> <p>398 Zoology</p> <p>400 Biological Sciences, Other</p> <p>NATURAL SCIENCES: PHYSICAL SCIENCES</p> <p>411 Astronomy</p> <p>412 Chemistry</p> <p>413 Physics</p> <p>414 Earth, Atmosphere, and Oceanographic (Geological Sciences)</p> <p>420 Physical Sciences, Other</p> <p>430 PARKS & RECREATION</p> <p>PHILOSOPHY, RELIGION & THEOLOGY</p> <p>440 Philosophy</p> <p>441 Religion</p> <p>442 Theology</p> <p>470 PHYSICAL EDUCATION</p> <p>500 PROTECTIVE SERVICES (e.g., Criminal Justice, Fire Protection)</p> <p>510 PSYCHOLOGY</p> <p>520 PUBLIC AFFAIRS (e.g., Community Services, Public Administration, Public Works, Social Work)</p> <p>530 SCIENCE TECHNOLOGIES</p> <p>SOCIAL SCIENCES & HISTORY</p> <p>541 Social Sciences, General</p> <p>542 Anthropology</p> <p>543 Archeology</p> <p>544 Area & Ethnic Studies</p> <p>545 Demography</p> <p>546 Economics</p> <p>547 Geography</p> <p>548 History</p> <p>549 International Relations</p> <p>550 Political Science & Government</p> <p>551 Sociology</p> <p>560 Other Social Sciences</p>	<p>VOCATIONAL TRAINING</p> <p>CONSTRUCTION TRADES</p> <p>601 Carpentry</p> <p>602 Electrician</p> <p>603 Plumbing</p> <p>610 Other Construction Trades</p> <p>CONSUMER, PERSONAL, & MISCELLANEOUS SERVICES</p> <p>621 Personal Services (e.g., Barbering, Cosmetology)</p> <p>630 Other Consumer Services</p> <p>MECHANICS & REPAIRERS</p> <p>641 Electrical & Electronics Equipment Repair</p> <p>642 Heating, Air Conditioning, & Refrigeration Mechanics & Repairers</p> <p>643 Vehicle & Mobile Equipment Mechanics & Repairers</p> <p>644 Other Mechanics & Repairers</p> <p>PRECISION PRODUCTION</p> <p>661 Drafting</p> <p>662 Graphic & Print Communications</p> <p>663 Leatherworking & Upholstering</p> <p>664 Precision Metal Work</p> <p>665 Woodworking</p> <p>670 Other Precision Production Work</p> <p>TRANSPORTATION & MATERIAL MOVING</p> <p>681 Air Transportation (e.g., Piloting, Traffic Control, Flight Attendance, Aviation Management)</p> <p>682 Land Vehicle & Equipment Operation</p> <p>683 Water Transportation (e.g., Boat & Fishing Operations, Deep Water Diving, Marina Operations, Sailors & Deckhands)</p> <p>690 Other Transportation & Material Moving</p> <p>900 OTHER</p>
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**SECTION B:
ACADEMIC/PROFESSIONAL BACKGROUND**

16. Please list below information about the degrees you have received. Do not list honorary degrees. If you have more than one degree at the same level, please list the most recent degree first. (Complete all columns for each degree. If you have none of the degrees or awards listed below, mark [x] the "NA" box.)

CODES FOR TYPE OF DEGREE

- | | |
|--|--|
| 1) First professional degree (M.D., D.O., D.D.S. or D.M.D., LL.B., J.D., D.C. or D.C.M., D.Par., Pod.D. or D.P., D.V.M., O.D., M.Div. or H.H.L. or B.D.) | 4) Other Master's degree (M.A., M.S., M.B.A., M.Ed., etc.) |
| 2) Doctoral degree (Ph.D., Ed.D., etc.) | 5) Bachelor's degree (B.A., A.B., B.S., etc.) |
| 3) Masters of Fine Arts, Masters of Social Work (M.F.A., M.S.W.) | 6) Associate's degree or equivalent (A.A., A.S., etc.) |
| | 7) Certificate or diploma for completion of undergraduate program (other than Associate's or Bachelor's) |

NA. Not Applicable; do not hold a degree or award listed above (SKIP TO QUESTION 17)

	A. Degree Code (see box above)	B. Year Received	C. Name of Field	D. Field Code (from pages 3-4)	E. a. Name of Institution, and b. City and State/Country of Institution
1. Highest	<input type="checkbox"/>	19 <input type="text"/>	<input type="text"/>	<input type="text"/>	a. <input type="text"/> b. <input type="text"/>
2. Next Highest	<input type="checkbox"/>	19 <input type="text"/>	<input type="text"/>	<input type="text"/>	a. <input type="text"/> b. <input type="text"/>
3. Next Highest	<input type="checkbox"/>	19 <input type="text"/>	<input type="text"/>	<input type="text"/>	a. <input type="text"/> b. <input type="text"/>
4. Next Highest	<input type="checkbox"/>	19 <input type="text"/>	<input type="text"/>	<input type="text"/>	a. <input type="text"/> b. <input type="text"/>

17. Are you currently working toward a degree? (Mark [x] one box.)

- Yes
- No (SKIP TO QUESTION 19, PAGE 6)

18. Please indicate below (A) the type of degree you are currently working toward, (B) the year you anticipate receiving it, (C) name of the field, (D) the field code that applies (from pages 3-4), and (E) the name and location of the institution from which you anticipate receiving this degree. (Complete all columns.)

	A. Degree Code (see box above)	B. Year Anticipated	C. Name of Field	D. Field Code (from pages 3-4)	E. a. Name of Institution and b. City and State/Country of Institution
Degree Working Toward	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	a. <input type="text"/> b. <input type="text"/>

19. Do you consider your position at this institution to be your primary employment? (Mark [x] one box.)

Yes

No

20. During the 1998 Fall Term, did you do outside consulting in addition to your employment at this institution? (Mark [x] one box.)

Yes

No

21. During the 1998 Fall Term, did you have professional employment other than consulting in addition to your employment at this institution? (Mark [x] one box.)

Yes

No (SKIP TO QUESTION 23)

22. How many different professional jobs/positions, other than your employment at this institution or consulting jobs, did you have during the 1998 Fall Term? (Write in number.)

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Number of other jobs

23. In total, how many professional positions in higher education institutions have you held? Consider promotions in rank at the same institution as part of the same position. If your occupational classification changed within the same institution, please consider this a separate position. (Include your position at this institution and all other full-time and part-time positions. Do not include teaching or research assistant positions.)

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Number of positions

Continue on next page →

24. The next questions ask about your first professional position in a higher education institution, and your most recent professional position at a higher education institution (other than the one you currently hold at this institution. (If your current position is your first position, complete column 1. If you have no other additional professional positions, mark [x] the "NA" box at the top of the second column.)

- Do not list promotions in rank at one place of employment as different positions.
- Do not include work as a graduate student.

	First Professional Position in a Higher Education Institution	Most Recent Professional Position at a Higher Ed Institution (other than the one you currently hold at this institution) <input type="checkbox"/> NA No other positions
1 YEARS JOB HELD	(Write in year)	(Write in year)
FROM	19 <input type="text"/> <input type="text"/>	19 <input type="text"/> <input type="text"/>
TO (If a current position, mark [x] "Present")	19 <input type="text"/> <input type="text"/> <input type="checkbox"/> Present	19 <input type="text"/> <input type="text"/> <input type="checkbox"/> Present
2 TYPE OF INSTITUTION	(Mark [x] one box)	(Mark [x] one box)
4-year doctoral granting college or university, graduate or professional school	<input type="checkbox"/>	<input type="checkbox"/>
4-year non-doctoral granting college or university	<input type="checkbox"/>	<input type="checkbox"/>
2-year degree granting college	<input type="checkbox"/>	<input type="checkbox"/>
Other postsecondary institution	<input type="checkbox"/>	<input type="checkbox"/>
3 EMPLOYMENT STATUS	(Mark [x] one box)	(Mark [x] one box)
Full-time	<input type="checkbox"/>	<input type="checkbox"/>
Part-time	<input type="checkbox"/>	<input type="checkbox"/>
4 PRIMARY RESPONSIBILITY	(Mark [x] one box)	(Mark [x] one box)
Administration, Management	<input type="checkbox"/>	<input type="checkbox"/>
Instruction/Research/Public Service	<input type="checkbox"/>	<input type="checkbox"/>
Other Professional (Support/Service/Clinical)	<input type="checkbox"/>	<input type="checkbox"/>
5 ACADEMIC RANK/TITLE (What were your academic ranks when you began and left this academic position? If current job, do not indicate rank at exit.)	(Mark [x] one box in each column) At Hire At Exit	(Mark [x] one box in each column) At Hire At Exit
Professor	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Associate Professor	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Assistant Professor	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Instructor	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Lecturer	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Other	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
NA Not applicable, no rank	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
6 TENURE STATUS (What was your tenure status when you began and left this academic position? If current job, do not indicate tenure at exit.)	(Mark [x] one box in each column) At Hire At Exit	(Mark [x] one box in each column) At Hire At Exit
Tenured	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
On tenure track but not tenured	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Not on tenure track although institution has a tenure system	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
No tenure system at this institution	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

25. How many years have you been teaching in higher education institutions?

(Write in number. If none, write in "0". If less than 1 year, write in "1".)

Number of years

26. How many professional positions, outside of higher education institutions, have you held? Do not include consulting jobs *(Write in number. If none, mark the box indicating "None".)*

None *(SKIP TO QUESTION 29, PAGE 9)*

Number of professional positions outside higher education institutions

27. How many of these positions were... *(Write in number of full-time and part-time professional positions outside of higher education institutions. If none, write in "0".)*

Full-time Part-time

28. The next questions ask about professional positions outside of higher education institutions you have held. List information on your first and your most recent professional positions outside of higher education institutions. Do not include positions you began in 1999.

	First Professional Position Outside of a Higher Education Institution	Most Recent Professional Position Outside of a Higher Ed. Institution <input type="checkbox"/> NA: No other Professional positions
1 YEARS JOB HELD	<i>(Write in year)</i>	<i>(Write in year)</i>
FROM:	<input type="text"/> 19 <input type="text"/> <input type="text"/>	<input type="text"/> 19 <input type="text"/> <input type="text"/>
TO <i>(If a current position, mark [x] "Present")</i>	<input type="text"/> 19 <input type="text"/> <input type="text"/> <input type="checkbox"/> Present	<input type="text"/> 19 <input type="text"/> <input type="text"/> <input type="checkbox"/> Present
2 TYPE OF EMPLOYER	<i>(Mark [x] one box)</i>	<i>(Mark [x] one box.)</i>
Elementary or secondary school	<input type="checkbox"/>	<input type="checkbox"/>
Hospital or other health care organization or clinical setting	<input type="checkbox"/>	<input type="checkbox"/>
Foundation or other non-profit organization other than health care organization	<input type="checkbox"/>	<input type="checkbox"/>
For-profit business or industry in the private sector	<input type="checkbox"/>	<input type="checkbox"/>
Government (federal, state, or local) or military	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>
3 EMPLOYMENT STATUS	<i>(Mark [x] one box)</i>	<i>(Mark [x] one box.)</i>
Full-time	<input type="checkbox"/>	<input type="checkbox"/>
Part-time	<input type="checkbox"/>	<input type="checkbox"/>
4 PRIMARY RESPONSIBILITY	<i>(Mark [x] one box)</i>	<i>(Mark [x] one box)</i>
Administration, Management	<input type="checkbox"/>	<input type="checkbox"/>
Instruction, Research, or Public Service	<input type="checkbox"/>	<input type="checkbox"/>
Other Professional (Support/Service/Clinical)	<input type="checkbox"/>	<input type="checkbox"/>
Technical	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

29. How many of each of the following have you presented/published/etc. during your entire career and during the last two years? For publications, please include *only* works that have been accepted for publication. Count multiple presentations/publications of the same work *only* once. Include electronic publications that are not published elsewhere in the appropriate categories. (Mark the "NA" box if you have not published or presented.)

NA. Not applicable. No presentations/publications/etc. (SKIP TO QUESTION 30, PAGE 10)

Type of Presentation/Publication/etc. (Write a number in each box. If none, write in "0".)	Total during career	Total during past two years	
		Sole responsibility	Joint responsibility
1. Articles published in refereed professional or trade journals; creative works published in junied media	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
2. Articles published in nonrefereed professional or trade journals; creative works published in nonjunied media or in-house newsletters	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
3. Published reviews of books, articles, or creative works; chapters in edited volumes	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
4. Textbooks, other books; monographs, research or technical reports disseminated internally or to clients	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
5. Presentations at conferences, workshops, etc.; exhibitions or performances in the fine or applied arts	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
6. Other, such as patents or computer software products	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

Continue on next page →

SECTION C:
INSTITUTIONAL RESPONSIBILITIES AND WORKLOAD

30. On average, how many hours per week did you spend at each of the following kinds of activities during the 1998 Fall Term? (*Write in average number of hours. If not sure, give your best estimates. If none, write in "0".*)

Average number of
hours per week



- a. All paid activities at this institution (e.g. teaching, clinical service, class preparation, research, administration)
- b. All unpaid activities at this institution
(Please specify type of activities below.)
- c. Any other paid activities outside this institution
(e.g., consulting, working on other jobs)
- d. Unpaid (pro bono) professional service activities
outside this institution

31. In column A, please allocate your *total* work time in the 1998 Fall Term (as reported in Question 30a-d) into several categories. We realize the categories are not mutually exclusive (e.g., research may include teaching; preparing a course may be part of professional growth). We ask, however, that you allocate as best you can the percentage of your time spent in activities whose primary focus falls within the indicated categories. In column B, indicate what percentage of your time you would *prefer* to spend in each of the listed categories. Time spent with colleagues should be allocated to a specific activity.

<i>(Write in a percentage on each line. If not sure, give your best estimate; if none, write in "0".)</i>	A % of Work Time Spent	B % of Work Time Preferred
a. <u>Teaching Undergraduate Students</u> (including teaching; grading papers; preparing courses; developing new curricula; advising or supervising students; supervising student teachers and interns; working with student organizations or intramural athletics)	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>
b. <u>Teaching Graduate or First Professional Students</u> (including teaching; grading papers; preparing courses; developing new curricula; advising or supervising students; supervising student teachers and interns; supervising clinical students; working with student organizations or intramural athletics)	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>
c. <u>Research/Scholarship</u> (including research; reviewing or preparing articles or books; attending or preparing for professional meetings or conferences; reviewing proposals; seeking outside funding; giving performances or exhibitions in the fine or applied arts; or giving speeches)	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>
d. <u>Professional Growth</u> (including taking courses; pursuing an advanced degree; other professional development activities; such as practice or activities to remain current in your field)	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>
e. <u>Administration</u> (including departmental or institution-wide meetings or committee work)	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>
f. <u>Service</u> (including providing legal or medical services or psychological counseling to clients or patients; paid or unpaid community or public service; service to professional societies/associations)	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>
g. <u>Outside Consulting, Freelance Work, Other Outside Work/Other Non-Teaching Professional Activities</u> (other activities or work not listed in a-f)	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/>
Please be sure that the percentages you provide add up to 100%.	100%	100%

32. During the 1998 Fall Term, how many undergraduate or graduate thesis or dissertation committees, comprehensive exams or orals committees, or examination or certification committees did you serve on at this institution; how many did you chair, and what was the average number of hours spent in these activities per week? (Write in a number on each line. If none, write in "0". Mark the "NA" box if you did not serve on any committees.)

NA. Not applicable. Did not serve on any undergraduate or graduate committees (SKIP TO QUESTION 33)

Type of Committee	Number served on	Of that number, how many did you chair?	Average number of hours per week
	(Write in number in each box. If none, write in "0")		
1 Undergraduate thesis honors committees, comprehensive exams or orals committees, examination/certification committees	<input type="text"/>	<input type="text"/>	<input type="text"/>
2 Graduate thesis or dissertation committees, comprehensive exams or orals committees (other than as part of thesis/dissertation committees); examination/certification committees	<input type="text"/>	<input type="text"/>	<input type="text"/>

33. During the 1998 Fall Term, what was the total number of classes or sections you taught at this institution? (Mark the "NA" box if you did not teach any classes.)

- Do not include individualized instruction, such as independent study, individual performance classes, or working with individual students in a clinical or research setting.
- Count multiple sections of the same course as a separate class (e.g., if you taught Sociology 101 to two different groups of students during the term, count this as two separate classes).
- Count lab or discussion sections of a class as the same class (e.g., if you taught Biology 202 to a group of students during the term and the class consisted of a lecture two times a week, a lab one day a week, and a discussion section one day a week, count this work as one class).

NA. Not applicable, no classes taught (SKIP TO QUESTION 48, PAGE 14)

Number of classes/sections (i.e., credit and non-credit)

34. How many different courses (preparations) do these classes/sections represent? (Write in number. If none, write in "0".)

Number of courses these classes/sections represent

35. How many of the classes/sections that you taught during the 1998 Fall Term were remedial? (Write in number. If none, write in "0".)

Number of classes/sections that were remedial, i.e., credit and non-credit. (IF NONE, SKIP TO QUESTION 37)

36. How many of these remedial classes/sections were not creditable toward a degree (non-credit classes)? (Write in number. If none, write in "0".)

Number of remedial classes/sections that were not creditable toward a degree (non-credit)

Continue to next page →

37. How many of the classes/sections that you taught during the 1998 Fall Term were continuing education classes? (Write in number. If none, write in "0")

Number of classes/sections that were continuing education (IF NONE, SKIP TO QUESTION 39)

38. How many of these continuing education classes/sections were not creditable toward a degree (non-credit classes)? (Write in number. If none, write in "0".)

Number of continuing education classes/sections that were not creditable toward a degree (non-credit)

39. What is the total number of students enrolled in all your non-credit classes/sections combined? (Write in number. If none, write in "0".)

Total number of students enrolled in non-credit classes/sections

40. How many of the classes/sections that you taught during the 1998 Fall Term were for credit? (Write in number. If none, write in "0".)

Number of classes/sections for credit (IF NONE, SKIP TO QUESTION 43, PAGE 14)

Continue to next page →

41. For each credit class or section that you taught at this institution during the 1998 Fall Term, please answer the following questions. For each class, enter the code for the academic discipline of the class. (Refer to pages 3-4 for the codes. Please enter the code rather than the course name.)

- Do not include individualized instruction, such as independent study or individual one-on-one performance classes.
- If you taught multiple sections of the same course, count them as separate classes, but do not include the lab section of the course as a separate class.

	A. For-credit Class A (enter code)	B. For-credit Class B (enter code)	C. For-credit Class C (enter code)	D. For-credit Class D (enter code)	E. For-credit Class E (enter code)
1 CODE FOR ACADEMIC DISCIPLINE OF CLASS (from pages 3-4)	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
2 DURING 1998 FALL TERM (Complete each box)					
a Number of weeks the class met	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
b Number of credit hours	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
c Number of hours the class met per week	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
d Number of teaching assistants, readers	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
e Number of students enrolled	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
f Was this class team taught?	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi
g Average # hours per week you taught the class	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
h Was this class considered a remedial class?	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi
i Was this class taught through a distance education program?	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi	<input type="checkbox"/> Yes <input type="checkbox"/> Noi
3 PRIMARY LEVEL OF STUDENTS (Mark [x] one box.)					
Undergraduate students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Graduate students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
First professional students (e.g., dental, medical, law, theology, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 PRIMARY INSTRUCTIONAL METHOD USED (Mark [x] one box.)					
Lecture/Discussion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seminar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lab, clinic, or problem session	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apprenticeship, internship, field work, or field trips	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 PRIMARY MEDIUM USED (Mark [x] one box.)					
Face-to-face	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TV-based	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

42. In how many of the undergraduate courses that you taught for credit during the 1998 Fall Term did you use... (Mark [x] one box for each item.)

NA. Did not teach any undergraduate classes for credit (SKIP TO QUESTION 43)

	None ▼	Some ▼	All ▼
a. Student evaluations of each other's work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Multiple-choice midterm and/or final exam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Essay midterm and/or final exams?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Short-answer midterm and/or final exams?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Term/research papers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Multiple drafts of written work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Grading on a curve?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Competency-based grading?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

43. During the 1998 Fall Term, did you have websites for any of the classes you taught? (Mark [x] one box.)

Yes

No (SKIP TO QUESTION 45)

44. What did you use the websites for? (Mark [x] "Yes" or "No" for each item.)

	Yes ▼	No ▼
a. To post general class information (e.g., syllabus and office hours)	<input type="checkbox"/>	<input type="checkbox"/>
b. To post information on homework assignments or readings	<input type="checkbox"/>	<input type="checkbox"/>
c. To post practice exams/exercises that provide immediate scoring	<input type="checkbox"/>	<input type="checkbox"/>
d. To post exams or exam results	<input type="checkbox"/>	<input type="checkbox"/>
e. To provide links to other information	<input type="checkbox"/>	<input type="checkbox"/>
f. Other (Please specify below.)	<input type="checkbox"/>	<input type="checkbox"/>

45. During the 1998 Fall Term, did you use electronic mail (e-mail) to communicate with students in your classes? (Mark [x] one box.)

Yes

No (SKIP TO QUESTION 48)

46. Approximately what percent of the students in your classes communicated with you via e-mail during the 1998 Fall Term? (Write in percent. If none, write in "0".)

Percent of students in your classes who communicated with you via e-mail

47. Approximately how many hours per week did you spend responding to student e-mail during the 1998 Fall Term? (Write in number of hours. If none, write in "0".)

Hours per week spent responding to student e-mail

48. During the 1998 Fall Term, did you have access to the internet... (Mark [x] one box.)

Both at home and at work

At work only

At home only

No access to the internet

49. For each type of student listed below, please indicate how many students received individual instruction from you during the 1998 Fall Term (e.g., independent study; supervising student teachers or interns; or one-on-one instruction, including working with individual students in a clinical or research setting), and the total number of contact hours with these students per week. Do not count regularly scheduled office hours. (Write in a number. If none, write in "0".)

Type of students receiving formal individualized instruction	Number of students ▼	Total contact hours per week ▼
a. Undergraduate students	<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/>	<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/>
b. Graduate students	<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/>	<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/>
c. First professional students (e.g., dental, medical, optometry, osteopathic, pharmacy, veterinary, chiropractic, law, and theology)	<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/>	<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/>

59b. How were these funds used? (Mark [x] all that apply.)

- Research
- Program/curriculum development
- Other

60. How would you rate each of the following facilities or resources at this institution that were available for your own use during the 1998 Fall Term? (Mark [x] one box for each item.)

	Poor ▼	Fair ▼	Good ▼	Excellent ▼	Not Available/ Not Applicable/ Don't Know ▼
a. Basic research equipment/instruments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Laboratory/research space and supplies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Availability of teaching assistants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Availability of research assistants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Personal computers and local networks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Centralized (main frame) computer facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Internet connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Technical support for computer-related activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Audio-visual equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Classroom space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Office space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Studio/performance space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Secretarial support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Library holdings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Continue to next page →

61. During the past two years, did you use institutional funds for any of the purposes specified below? (Mark [x] one item for each category.)

	Yes ▼	No, although funds were available ▼	No, no funds were available, or not eligible ▼	No, don't know if funds were available ▼
a. Tuition remission at this or other institution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Professional association memberships and/or registration fees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Professional travel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Training to improve research or teaching skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Release time from teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Sabbatical leave	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

62. During the 1998 Fall Term, how many of the following types of administrative committees did you serve on at this institution? How many of these committees did you chair? Include committees at the department or division level, the school or college level, and institution- and system-wide committees. (Write a number in each box. If you did not serve on or chair a committee, write "0" for each item. If you did not serve on or chair any administrative committees mark [x] the NA box.)

NA. Not applicable: did not serve on or chair any administrative committees. (SKIP TO QUESTION 64)

	Number of Committees Served On ▼	Number of Committees Chaired ▼
a. Curriculum Committees	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
b. Personnel Committees (e.g., search or recruitment committees)	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
c. Governance Committees (e.g., faculty senate, student retention, budget, or admissions)	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
d. Other	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

63. On average, approximately how many hours per week did you spend on administrative committee work? (Write in number. If none, write in "0".)

Hours per week spent on committee work

64. Are you a member of a union (or other bargaining association) that is the legally recognized representative of the faculty at this institution? (Mark [x] one box.)

- Union/bargaining association is not available
- Union/bargaining association is available, but I am not eligible
- I am eligible, but not a member
- I am eligible, and a member

SECTION D:
JOB SATISFACTION ISSUES

65. How satisfied or dissatisfied are you with each of the following aspects of your instructional duties at this institution? (Mark [x] one box for each item. Mark [x] "NA" if you had no instructional duties.)

NA. Not applicable; no instructional duties (SKIP TO QUESTION 66)

	Very Dissatisfied ▼	Somewhat Dissatisfied ▼	Somewhat Satisfied ▼	Very Satisfied ▼	Not Applicable ▼
a. The authority I have to make decisions about content and methods in the courses I teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. The authority I have to make decisions about what courses I teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. The authority I have to make decisions about other (non-instructional) aspects of my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d. Time available for working with students as an advisor, mentor, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e. Time available for class preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
f. Quality of undergraduate students whom I have taught here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Quality of graduate students whom I have taught here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

66. How satisfied or dissatisfied are you with the following aspects of your job at this institution? (Mark [x] one box for each item.)

	Very Dissatisfied ▼	Somewhat Dissatisfied ▼	Somewhat Satisfied ▼	Very Satisfied ▼	Not Applicable ▼
a. My work load	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. My job security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. Opportunity for advancement in rank at this institution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d. Time available for keeping current in my field	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e. The effectiveness of faculty leadership at this institution (e.g. academic senate, faculty councils, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
f. Freedom to do outside consulting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
g. My salary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
h. My benefits, generally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
i. Spouse or partner employment opportunities in this geographic area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. My job here, overall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

67. During the next three years, how likely is it that you will leave this job to: *(Mark [x] one box for each item.)*

	Not at All Likely ▼	Somewhat Likely ▼	Very Likely ▼
a. Accept a <i>part-time</i> job at a <i>different</i> postsecondary institution?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Accept a <i>full-time</i> job at a <i>different</i> postsecondary institution?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Accept a <i>part-time</i> job <i>not at a</i> postsecondary institution?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Accept a <i>full-time</i> job <i>not at a</i> postsecondary institution?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Retire from the labor force?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

68. At what age do you think you are most likely to stop working at a postsecondary institution? *(Write in age or mark "DK. Don't Know".)*

Years of age

DK. Don't Know

69. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? *(Mark [x] one box for each item.)*

	Not Important ▼	Somewhat Important ▼	Very Important ▼	Not Applicable ▼
a. Salary level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. Tenure-track/tenured position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. Job security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d. Opportunities for advancement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e. Benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
f. No pressure to publish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
g. Good research facilities and equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
h. Good instructional facilities and equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
i. Good job or job opportunities for my spouse or partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Good geographic location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
k. Good environment/schools for my children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Greater opportunity to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
m. Greater opportunity to do research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

70. Of the factors listed in Question 69, write in the letter of the item (a-m) that would be most important in your decision to leave. (Write in a letter, a-m, from Question 69.)

71. If you could elect to draw on your retirement and still continue working at this institution on a part-time basis, would you do so? (Mark [x] one box.)

 Yes No DK. Don't Know

72. Have you retired from another position? (Mark [x] one box.)

 Yes No

73. If an early retirement option were offered to you at this institution, would you take it? (Mark [x] one box.)

 Yes No DK. Don't Know

74. At which age do you think you are most likely to retire from all paid employment? (Write in age or mark "DK. Don't Know".)

 Years of age DK. Don't Know

Continue to next page →

SECTION E: COMPENSATION

Note: Your responses to these items as with all other items in this questionnaire are voluntary and strictly confidential. They will be used only in statistical summaries, and will not be disclosed to your institution or to any individual or group.

75. What is your basic salary from this institution for the 1998-99 academic year? (Write in dollar amount. If not sure, give your best estimates; if no basic salary, mark [x] the "NA. Not Applicable" box.)

NA. Not Applicable
 ▼

a Basic salary for academic year \$.00

b Basic salary is based on: (Mark [x] one box in "Type" and write in "Number" below.)

TYPE	NUMBER	
<input type="checkbox"/> length of appointment in months (e.g. 9 months)	<input type="text"/> <input type="text"/>	months
<input type="checkbox"/> number of credit hours taught	<input type="text"/> <input type="text"/>	credit hours
<input type="checkbox"/> number of classes taught	<input type="text"/> <input type="text"/>	classes
<input type="checkbox"/> other (Please specify.) <input style="width: 150px;" type="text"/>	<input type="text"/> <input type="text"/>	(Specify.) <input style="width: 100px;" type="text"/>

76. For the 1998 calendar year, please estimate your gross compensation before taxes from each of the sources listed below. (Write in dollar amount. If not sure, give your best estimates; if no compensation from a source, mark [x] the "NA. Not Applicable" box.)

NA. Not Applicable
 ▼

Compensation from this institution:

a Basic salary for calendar year \$.00

b Other income from this institution not included in basic salary (e.g., for summer session, overload courses, administration, research, coaching sports, etc.) \$.00

c Non-monetary compensation, such as food, housing, car provided by this institution (do not include employee benefits such as medical, dental, or life insurance) \$.00

Compensation from other sources:

d Employment at another academic institution \$.00

e Any other employment \$.00

f Legal or medical services or psychological counseling \$.00

g Outside consulting, consulting business or freelance work \$.00

h Self-owned business (other than consulting) \$.00

i Professional performances or exhibitions \$.00

j Speaking fees, honoraria \$.00

	NA. Not Applicable ▼
k Royalties or commissions	\$ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .00 <input type="checkbox"/>
l Non-monetary compensation, such as food, housing, car (do not include other employee benefits such as medical, dental, or life insurance)	\$ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .00 <input type="checkbox"/>
Other sources of earned income (Please specify below)	
m <input style="width: 200px; height: 20px;" type="text"/>	\$ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .00 <input type="checkbox"/>
n <input style="width: 200px; height: 20px;" type="text"/>	\$ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .00 <input type="checkbox"/>

77. What was the gross income of your spouse or significant other for the 1998 calendar year? (Write in number. If no income, write in "0". If no spouse or significant other, mark the "NA" box. If don't know, mark the "DK" box.)

\$.00 Gross income of spouse/significant other for 1998

NA No spouse or significant other

DK Don't know

78. For the 1998 calendar year, how many persons lived in your household including yourself? (Write in number.)

Total number in household

79. For the 1998 calendar year, what was your total household income before taxes? (Write in number.)

\$.00 Total household income before taxes

80. For the 1998 calendar year, how many dependents did you have? Do not include yourself. (A dependent is someone receiving at least half of his or her financial support from you.) (Write in number. If none, write in "0".)

Number of dependents

SECTION F:
SOCIODEMOGRAPHIC CHARACTERISTICS

<p>81. Are you ...</p> <p><input type="checkbox"/> Male</p> <p><input type="checkbox"/> Female</p> <p>82. In what month and year were you born? (Write in month and year.)</p> <p><input type="text" value=""/> <input type="text" value=""/> <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value=""/> <input type="text" value=""/></p> <p style="text-align: center;">Month Year</p> <p>83. What is your ethnicity? (Mark [x] one box.)</p> <p><input type="checkbox"/> Hispanic or Latino</p> <p><input type="checkbox"/> Not Hispanic or Latino</p> <p>84. What is your race? (Mark [x] one or more.)</p> <p><input type="checkbox"/> American Indian or Alaska Native</p> <p><input type="checkbox"/> Asian</p> <p><input type="checkbox"/> Black or African American</p> <p><input type="checkbox"/> Native Hawaiian or Other Pacific Islander</p> <p><input type="checkbox"/> White</p> <p>85. Are you a person with a disability? (Mark [x] one box.)</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No (SKIP TO QUESTION 87)</p>	<p>86. What type of disability do you have? (Mark [x] all that apply.)</p> <p><input type="checkbox"/> Hearing impairment (i.e., deaf or hard of hearing)</p> <p><input type="checkbox"/> Blind or visual impairment that cannot be corrected by wearing glasses, or legally blind</p> <p><input type="checkbox"/> Speech or language impairment</p> <p><input type="checkbox"/> Mobility/orthopedic impairment</p> <p><input type="checkbox"/> Other (e.g., specific learning disability, attention deficit, mental illness, or emotional disturbance)</p> <p>87. What was your marital status in the 1998 Fall Term? (Mark [x] one box.)</p> <p><input type="checkbox"/> Single, never married</p> <p><input type="checkbox"/> Married</p> <p><input type="checkbox"/> Living with someone in a marriage-like relationship</p> <p><input type="checkbox"/> Separated, divorced, widowed</p> <p>88. During the 1998 Fall Term, was your spouse or significant other employed in a professional position at a higher education institution? (Mark [x] one box.)</p> <p><input type="checkbox"/> Yes, at this institution</p> <p><input type="checkbox"/> Yes, at another higher education institution</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not Applicable</p> <p>89. In what country were you born? (Mark [x] one box.)</p> <p><input type="checkbox"/> USA</p> <p><input type="checkbox"/> Other (Please specify below)</p> <div style="border: 1px solid black; height: 15px; width: 100%; margin-top: 5px;"></div>
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90. What is your citizenship status? (Mark [x] one box.)

- United States citizen, native
- United States citizen, naturalized
- Permanent resident of the United States (immigrant visa)

 COUNTRY OF PRESENT CITIZENSHIP
- Temporary resident of United States (non-immigrant visa)

 COUNTRY OF PRESENT CITIZENSHIP

91. What is the highest level of formal education completed by your mother and your father? What is the highest level of formal education completed by your spouse or significant other? (Mark [x] one box for each person.)

	Mother ▼	Father ▼	Spouse/ Significant Other ▼
a. Doctorate degree or first professional degree (e.g., Ph.D., Ed.D., dental, medical, law, theology, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Master's degree (e.g., M.A., M.S., M.B.A., M.Ed., etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Bachelor's degree (e.g., B.A., A.B., B.S., etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Associate's degree (e.g., A.A., A.S., etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Some college	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. High school diploma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Less than high school diploma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Don't know or not applicable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION G:
OPINIONS**

92. Please indicate the extent to which you agree or disagree with each of the following statements. (Mark [x] one box for each item.)

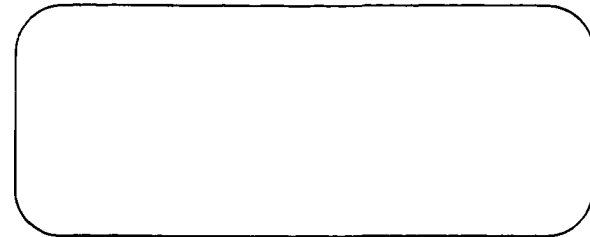
	Strongly Disagree ▼	Disagree ▼	Agree ▼	Strongly Agree ▼
a. Teaching effectiveness should be the primary criterion for promotion of faculty/instructional staff at this institution . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Research/publications should be the primary criterion for promotion of faculty/instructional staff at this institution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. At this institution, research is rewarded more than teaching . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Post-tenure review of faculty will improve the quality of higher education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. This institution should have a tenure system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Female faculty members are treated fairly at this institution . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Faculty who are members of racial or ethnic minorities are treated fairly at this institution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. If I had it to do over again, I would still choose an academic career	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

93. Please indicate the extent to which you agree or disagree with each of the following statements. Over recent years at this institution... (Mark [x] one box for each item.)

	Strongly Disagree ▼	Disagree ▼	Agree ▼	Strongly Agree ▼
a. It has become more difficult for faculty to obtain external funding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Faculty work load has increased	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The quality of undergraduate education has declined	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. The atmosphere is less conducive to free expression of ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. The quality of research has declined	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Too many full-time faculty have been replaced by part-time faculty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Endorsed by:

- American Association for Higher Education
- American Association of Community Colleges
- American Association of State Colleges and Universities
- American Association of University Professors
- American Council on Education
- American Federation of Teachers
- Association for Institutional Research
- Association of American Colleges and Universities
- Association of Catholic Colleges and Universities
- College and University Personnel Association
- The College Board
- The College Fund/UNCF
- Council of Graduate Schools
- The Council of Independent Colleges
- National Association for Equal Opportunity in Higher Education
- National Association of Independent Colleges and Universities
- National Association of State Universities and Land-Grant Colleges
- National Education Association



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Toll-Free Number: 1-800-633-0209

APPENDIX D

Approval of Human Subjects Committee.
Baylor University

5858 Denman's Loop
Belton, TX 76513
April 04, 2002

Dr. Ben Pierce
Chair, Human Subjects Committee
Baylor University
Waco, TX 76798

Dear Dr. Pierce:

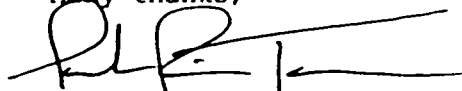
I am currently in the dissertation proposal stage of my doctoral work in the School of Education at Baylor. My faculty advisor, Dr. Robert Cloud, has suggested that I contact you, to see if it would be possible to obtain an exemption for my project from the Human Subjects Committee.

I am proposing a project that will utilize data that was collected by The U.S. Department of Education's National Center for Education Statistics in 1999. The data was gathered through the 1999 National Study of Postsecondary Faculty. This survey, which was also done in 1988 and 1993, gathered information from faculty members at colleges and universities across the U.S. The compiled data from the survey has recently been made available to researchers in a "DAS" format that allows researchers to cross tab the information and analyze it, but does not give them access to information that identifies those surveyed. My project will require me to filter the responses and isolate a subgroup: faculty at four-year (or higher) institutions who teach full-time in a field related to computer science. I will then compare the responses of this subgroup on questions about salary, workloads, and working conditions to information that has been previously gathered through surveys of computer science professionals in business and industry. (I will be working only with the reported results of the latter surveys and will not personally examine data from any of them.)

Because I am using a previously established survey and will not be administering the survey myself, and because the U.S. Department of Education has already gone to great lengths to protect the identities of the participants and make sure that the survey is fair and accurate in every other way, I believe that this project falls outside the range of projects that require the supervision of the Human Subjects Committee. I would appreciate, therefore, your considering this letter to be a request for exemption; if you would like me to frame such a request in another manner, I would be more than happy to comply.

I will, of course, go through the process of going before the committee, if you deem it to be more appropriate. Please let me know your preference, and I will proceed accordingly.

Many thanks,



Paula Price Tanner

BAYLOR

U N I V E R S I T Y

April 5, 2002

Ms. Paula Tanner
5858 Denman's Loop
Belton, TX 76513

Dear Ms. Tanner:

Based on the information you have provided, it appears that the research you are planning involves only previously recorded data and that there will be no direct or indirect link back to the participants. According to section 46.101 b 4 of the Federal Policy for the Protection of Human Subjects, this type of study is exempt from the requirement of IRB approval.

My interpretation is that your research does not require approval from the Baylor University Committee for the Protection of Human Subjects (IRB).

Sincerely,



Ben Pierce, Ph.D.
Associate Dean for Sciences and
Chair, University Committee for the
Protection of Human Subjects

xc: Dr. Robert Cloud, Faculty Advisor

COLLEGE OF ARTS AND SCIENCES
OFFICE OF THE DEAN
PO BOX 97344 WACO, TEXAS 76798-7344 (254) 710-3361 FAX (254) 710-3639

APPENDIX E

Independent t-Test Results, Comparing Types of Institutions

Table E.1

Intrinsic Factors: Means Comparisons, Research vs. Doctoral

Question	Label	Levine's test for equality of variances: sig.	Equal variances assumed not assumed	t-test for equality of means: sig. (two-tailed)
Q30A	Hours week paid activities at institution	.182	Equal variances assumed	.041
Q30B	Hours week unpaid activities at institution	.548	Equal variances assumed	.586
Q30C	Hours week paid activity not at institution	.155	Equal variances assumed	.404
Q30D	Hours week unpaid activity not at institution	.196	Equal variances assumed	.449
Q31A1	Time actually spent teaching	.738	Equal variances assumed	.620
Q31A3	Time actually spent at research	.404	Equal variances assumed	.144
Q31A4	Time actually spent on professional growth	.373	Equal variances assumed	.216
Q31A5	Time actually spent at administration	.316	Equal variances assumed	.281
Q31A6	Time actually spent on service activity	.913	Equal variances assumed	.382
Q31A7	Time actually spent on consulting	.745	Equal variances assumed	.925
Q31B1	Time preferred at teaching	.912	Equal variances assumed	.389
Q31B3	Time preferred at research	.197	Equal variances assumed	.462
Q31B4	Time preferred at professional growth	.216	Equal variances assumed	.748

(table continues)

Table E.1 (continued)

Question	Label	Levine's test for equality of variances: sig.	Equal variances assumed not assumed	t-test for equality of means: sig. (two-tailed)
Q31B5	Time preferred at administration	.374	Equal variances assumed	.534
Q31B6	Time preferred on service activity	.246	Equal variances assumed	.130
Q31B7	Time preferred on consulting	.589	Equal variances assumed	.778
Q32A1	Number undergraduate committees served on	.002	Equal variances not assumed	.040
Q32A2	Number graduate committees served on	.027	Equal variances not assumed	.087
Q32B1	Number undergraduate committees chaired	.000	Equal variances not assumed	.051
Q32B2	Number graduate committees chaired	.118	Equal variances assumed	.210
Q33	Total classes taught	.472	Equal variances assumed	.709
Q34	Total courses taught	.192	Equal variances assumed	.942
Q35	Remedial classes taught	.000	Equal variances not assumed	.200
Q37	Continuing education classes taught	.003	Equal variances not assumed	.275
Q51	Total office hours week	.265	Equal variances assumed	.293
Q52	Any creative work writing research	.035	Equal variances not assumed	.291
Q54	Any funded research	.130	Equal variances assumed	.439
Q55	PI or Co-PI on grants or contracts	.766	Equal variances assumed	.878
Q61A	Funds for tuition remission	1.00	Equal variances assumed	1.000
Q61B	Funds for professional associations	.002	Equal variances not assumed	.118

(table continues)

Table E.1 (continued)

Question	Label	Levine's test for equality of variances: sig.	Equal variances assumed / not assumed	t-test for equality of means: sig. (two-tailed)
Q61C	Funds for professional travel	.308	Equal variances assumed	.149
Q61D	Funds for improving teaching, research	.168	Equal variances assumed	.491
Q61F	Funds for sabbatical leave	.189	Equal variances assumed	.513
Q65A	Satisfaction w/ authority to decide course content	.008	Equal variances not assumed	.113
Q65B	Satisfaction w/ authority to decide courses taught	.297	Equal variances assumed	.676
Q65C	Satisfaction w/ authority to make other decisions	.026	Equal variances not assumed	.174
Q65D	Satisfaction w/ time available to advise students	.457	Equal variances assumed	.763
Q65F	Satisfaction w/ quality of undergraduate students	.001	Equal variances not assumed	.050
Q65G	Satisfaction w/ quality of graduate students	.342	Equal variances assumed	.724
Q66A	Satisfaction w/ workload	.677	Equal variances assumed	.549
Q66C	Satisfaction w/ advancement service activity	.825	Equal variances assumed	.927
Q66D	Satisfaction w/ time to keep current in field	.579	Equal variances assumed	.479
Q66F	Satisfaction w/ freedom to do consulting	.844	Equal variances assumed	.732
Q66J	Satisfaction w/ job overall	.091	Equal variances assumed	.624
Q69D	How important: advancement opportunities	.901	Equal variances assumed	.589
Q69F	How important: no publishing pressure	.190	Equal variances assumed	.526
Q69L	How important: teaching opportunities	.383	Equal variances assumed	.228
Q69M	How important: research opportunities	.751	Equal variances assumed	.164

Table E.2
Extrinsic Factors: Means Comparisons, Research vs. Doctoral

Question	Label	Levine's test for equality of variances: sig.	Equal variances assumed / not assumed	t-test for equality of means: sig. (two-tailed)
Q8	Academic rank	.1227	Equal variances assumed	.454
Q10	Tenure status	.635	Equal variances assumed	.318
Q11	Duration of contract	.008	Equal variances not assumed	.098
Q7	Years in current job	.569	Equal variances assumed	.515
Q23	Positions in higher education during career	.295	Equal variances assumed	.927
Q25	Years teaching in higher education	.285	Equal variances assumed	.202
Q20-21	Employed only at institution	.452	Equal variances assumed	.706
Q22	Number of positions outside institution	.820	Equal variances assumed	.706
Q60A	Rating of research equipment, instruments	.188	Equal variances assumed	.466
Q60B	Rating of lab space and supplies	.906	Equal variances assumed	.673
Q60D	Rating of availability of research assistants	.503	Equal variances assumed	.279
Q60E	Rating of computers, local networks	.738	Equal variances assumed	.559
Q60F	Rating of centralized computer facilities	.648	Equal variances assumed	.937
Q60G	Rating of Internet connections	.751	Equal variances assumed	.246
Q60I	Rating of audio-visual equipment	.512	Equal variances assumed	.722
Q60J	Rating of classroom space	.323	Equal variances assumed	.140
Q60K	Rating of office space	.284	Equal variances assumed	.614

(table continues)

Table E.2 (continued)

Question	Label	Levine's test for equality of variances: sig.	Equal variances assumed / not assumed	t-test for equality of means: sig. (two-tailed)
Q60M	Rating of secretarial support	.050	Equal variances assumed	.311
Q60N	Rating of library holdings	.683	Equal variances assumed	.798
Q66B	Satisfaction w/ job security	.313	Equal variances assumed	.709
Q66G	Satisfaction w/ salary	.758	Equal variances assumed	.700
Q66H	Satisfaction w/ benefits	.123	Equal variances assumed	.082
Q66I	Satisfaction w/ spouse job opportunities	.491	Equal variances assumed	.799
Q69A	How important: salary	.640	Equal variances assumed	.756
Q69B	How important: tenure	.248	Equal variances assumed	.024
Q69C	How important: job security	.379	Equal variances assumed	.315
Q69E	How important: benefits	.132	Equal variances assumed	.169
Q69G	How important: research facilities	.000	Equal variances not assumed	.007
Q69H	How important: instructional facilities	.071	Equal variances assumed	.873
Q69I	How important: spouse job opportunities	.654	Equal variances assumed	.871
Q69J	How important: geographic location	.382	Equal variances assumed	.170
Q69K	How important: good schools for children	.004	Equal variances assumed	.338
Q75	Total income from institution	.006	Equal variances not assumed	.023
Q76	Total personal income, all sources	.003	Equal variances not assumed	.015
Q79	Total household income	.001	Equal variances not assumed	.051

Table E.3
Demographic Factors: Means Comparisons, Research vs. Doctoral

Question	Label	Levine's test for equality of variances: sig.	Equal variances assumed / not assumed	t-test for equality of means: sig. (two-tailed)
Q16	Highest degree held	.712	Equal variances assumed	1.000
Q81	Gender	.000	Equal variances not assumed	.032
Q82	Age	.023	Equal variances not assumed	.506
Q83-84	Race	.000	Equal variances not assumed	.066
Q87	Marital status	.270	Equal variances assumed	.301
Q88	Spouse employed in higher education	.021	Equal variances not assumed	.247
Q89	Born in USA	.124	Equal variances assumed	.438
Q90	Citizenship status	.182	Equal variances assumed	.505
Q67A	Accept P/T postsecondary job in 3 yrs	.306	Equal variances assumed	.596
Q67B	Accept F/T postsecondary job in 3 yrs	.728	Equal variances assumed	.522
Q67C	Accept P/T non-postsecondary job in 3 yrs	.006	Equal variances not assumed	.128
Q67D	Accept F/T non-postsecondary job in 3 yrs	.470	Equal variances assumed	.788
Q67E	How likely retire in 3 yrs	.544	Equal variances assumed	.802
Q68	Age stop working at postsecondary institution	.007	Equal variances assumed	.194
Q71	Retire and work P/T at institution	.099	Equal variances assumed	.494
Q72	Have you retired from another position?	.149	Equal variances assumed	.479
Q73	Would you take early retirement?	.488	Equal variances assumed	.755
Q74	Age likely to retire from all paid employment	.000	Equal variances not assumed	.058

Table E.4a

Hours Per Week Paid Activities at Institution, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Hours week paid activities at inst	Research or Doctoral	122	47.67	11.344	1.027
	Comprehensive or Liberal Arts	225	43.77	13.195	.880

Table E.4b

Hours Per Week Paid Activities at Institution, by Type of Institution

		Hours week paid activities at inst		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	3.892		
	Sig.	.049		
	t	2.757	2.883	
	df	345	281.750	
t-test for Equality of Means	Sig. (2-tailed)	.006	.004	
	Mean Difference	3.90	3.90	
	Std. Error Difference	1.414	1.352	
	95% Confidence Interval of the Difference	Lower	1.118	1.237
		Upper	6.680	6.561

Table E.5a

Hours Per Week Unpaid Activities at Institution, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Hours week unpaid activities at inst	Research or Doctoral	122	3.26	6.606	.598
	Comprehensive or Liberal Arts	225	3.82	5.629	.375

Table E.5b

Hours Per Week Unpaid Activities at Institution, by Type of Institution

		Hours/week unpaid activities at inst		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.138		
	Sig.	.711		
t-test for Equality of Means	t	-.825	-.787	
	df	345	216.883	
	Sig. (2-tailed)	.410	.432	
	Mean Difference	-.56	-.56	
	Std. Error Difference	.673	.706	
	95% Confidence Interval of the Difference	Lower	-1.880	-1.947
		Upper	.769	.836

Table E.6a

Hours Per Week Paid Activities Not at Institution, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Hours week paid activity not at inst	Research or Doctoral	122	2.09	5.725	.518
	Comprehensive or Liberal Arts	225	2.94	7.051	.470

Table E.6b

Hours Per Week Paid Activities Not at Institution, by Type of Institution

		Hours week paid activity not at inst		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	3.842		
	Sig.	.051		
t-test for Equality of Means	t	-1.145	-1.218	
	df	345	294.331	
	Sig. (2-tailed)	.253	.224	
	Mean Difference	-.85	-.85	
	Std. Error Difference	.744	.700	
	95% Confidence Interval of the Difference	Lower	-2.315	-2.229
		Upper	.611	.525

Table E.7a

Hours Per Week Unpaid Activities Not at Institution, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Hours week unpaid activity not at inst	Research or Doctoral	122	1.52	2.974	.269
	Comprehensive or Liberal Arts	225	1.15	2.477	.165

Table E.7b

Hours Per Week Unpaid Activities Not at Institution, by Type of Institution

		Hours week unpaid activity not at inst	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	2.879	
	Sig.	.091	
t-test for Equality of Means	t	1.220	1.156
	df	345	212.886
	Sig. (2-tailed)	.223	.249
	Mean Difference	.37	.37
	Std. Error Difference	.299	.316
	95% Confidence Interval of the Difference	Lower Upper	-.223 .954

Table E.8a

Time Actually Spent Teaching, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent teaching	Research or Doctoral	122	62.29	20.517	1.857
	Comprehensive or Liberal Arts	225	68.40	20.459	1.364

Table E.8b

Time Actually Spent Teaching, by Type of Institution

		Time actually spent teaching		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.107		
	Sig.	.743		
t-test for Equality of Means	t	-2.653	-2.651	
	df	345	247.749	
	Sig. (2-tailed)	.008	.009	
	Mean Difference	-6.11	-6.11	
	Std. Error Difference	2.303	2.304	
	95% Confidence Interval of the Difference	Lower	-10.637	-10.648
		Upper	-1.580	-1.570

Table E.9a

Time Actually Spent at Research, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent at research	Research or Doctoral	122	19.42	16.372	1.482
	Comprehensive or Liberal Arts	225	9.17	11.779	.785

Table E.9b

Time Actually Spent at Research, by Type of Institution

		Time actually spent at research		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	21.146		
	Sig.	.000		
t-test for Equality of Means	t	6.716	6.107	
	df	345	190.351	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	10.24	10.24	
	Std. Error Difference	1.525	1.677	
	95% Confidence Interval of the Difference	Lower	7.244	6.936
		Upper	13.245	13.553

Table E.10a

Time Actually Spent on Professional Growth, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent on prof growth	Research or Doctoral	122	3.75	6.709	.607
	Comprehensive or Liberal Arts	225	6.07	7.446	.496

Table E.10b

Time Actually Spent on Professional Growth, by Type of Institution

		Time actually spent on professional growth	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	4.291	
	Sig.	.039	
t-test for Equality of Means	t	-2.858	-2.948
	df	345	271.228
	Sig. (2-tailed)	.005	.003
	Mean Difference	-2.31	-2.31
	Std. Error Difference	.809	.784
	95% Confidence Interval of the Difference	Lower Upper	-3.904 -.721

Table E.11a

Time Actually Spent at Administration, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent at administration	Research or Doctoral	122	8.93	9.209	.834
	Comprehensive or Liberal Arts	225	8.98	13.247	.883

Table E.11b

Time Actually Spent at Administration, by Type of Institution

		Time actually spent at administration	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	7.782	
	Sig.	.006	
t-test for Equality of Means	t	-.035	-.039
	df	345	324.309
	Sig. (2-tailed)	.972	.969
	Mean Difference	-.05	-.05
	Std. Error Difference	1.348	1.215
	95% Confidence Interval of the Difference	Lower Upper	-2.699 2.603

Table E.12a

Time Actually Spent on Service Activity, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent on service activity	Research or Doctoral	122	3.98	5.668	.513
	Comprehensive or Liberal Arts	225	3.83	7.170	.478

Table E.12b

Time Actually Spent on Service Activity, by Type of Institution

		Time actually spent on service activity	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.422	
	Sig.	.516	
t-test for Equality of Means	t	.198	.212
	df	345	300.046
	Sig. (2-tailed)	.843	.832
	Mean Difference	.15	.15
	Std. Error Difference	.751	.701
	95% Confidence Interval of the Difference	Lower Upper	-1.329 1.626

Table E.13a

Time Actually Spent on Consulting, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent on consulting	Research or Doctoral	122	1.63	4.783	.433
	Comprehensive or Liberal Arts	225	3.55	9.583	.639

Table E.13b

Time Actually Spent on Consulting, by Type of Institution

		Time actually spent on consulting	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	11.389	
	Sig.	.001	
t-test for Equality of Means	t	-2.076	-2.488
	df	345	343.059
	Sig. (2-tailed)	.039	.013
	Mean Difference	-1.92	-1.92
	Std. Error Difference	.925	.772
	95% Confidence Interval of the Difference	Lower Upper	-3.739 -.101

Table E.14a

Time Preferred at Teaching, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time preferred at teaching	Research or Doctoral	122	53.11	20.291	1.837
	Comprehensive or Liberal Arts	225	59.77	20.856	1.390

Table E.14b

Time Preferred at Teaching, by Type of Institution

		Time preferred at teaching		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.553		
	Sig.	.458		
t-test for Equality of Means	t	-2.867	-2.890	
	df	345	254.256	
	Sig. (2-tailed)	.004	.004	
	Mean Difference	-6.66	-6.66	
	Std. Error Difference	2.323	2.304	
	95% Confidence Interval of the Difference	Lower	-11.227	-11.196
		Upper	-2.090	-2.121

Table E.15a

Time Preferred at Research, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time preferred at research	Research or Doctoral	122	28.30	19.484	1.764
	Comprehensive or Liberal Arts	225	17.68	16.822	1.121

Table E.15b

Time Preferred at Research, by Type of Institution

		Time preferred at research		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.495		
	Sig.	.115		
t-test for Equality of Means	t	5.306	5.080	
	df	345	219.235	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	10.62	10.62	
	Std. Error Difference	2.001	2.090	
	95% Confidence Interval of the Difference	Lower	6.682	6.499
		Upper	14.555	14.739

Table E.16a

Time Preferred on Professional Growth, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time preferred on prof growth	Research or Doctoral	122	6.98	7.576	.686
	Comprehensive or Liberal Arts	225	9.68	8.099	.540

Table E.16b

Time Preferred on Professional Growth, by Type of Institution

		Time preferred on professional growth	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.125	
	Sig.	.724	
t-test for Equality of Means	t	-3.042	-3.103
	df	345	262.904
	Sig. (2-tailed)	.003	.002
	Mean Difference	-2.71	-2.71
	Std. Error Difference	.890	.873
	95% Confidence Interval of the Difference	Lower Upper	-4.460 -.958

Table E.17a

Time Preferred at Administration, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time preferred at admin	Research or Doctoral	122	5.31	7.530	.682
	Comprehensive or Liberal Arts	225	5.43	9.722	.648

Table E.17b

Time Preferred at Administration, by Type of Institution

		Time preferred at administration		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	4.225		
	Sig.	.041		
t-test for Equality of Means	t	-.114	-.122	
	df	345	304.303	
	Sig. (2-tailed)	.910	.903	
	Mean Difference	-.12	-.12	
	Std. Error Difference	1.013	.941	
	95% Confidence Interval of the Difference	Lower	-2.109	-1.966
		Upper	1.878	1.736

Table E.18a

Time Preferred on Service Activity, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time preferred on service activity	Research or Doctoral	122	4.17	5.914	.535
	Comprehensive or Liberal Arts	225	3.11	4.625	.308

Table E.18b

Time Preferred on Service Activity, by Type of Institution

		Time preferred on service activity		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.789		
	Sig.	.096		
t-test for Equality of Means	t	1.853	1.725	
	df	345	202.538	
	Sig. (2-tailed)	.065	.086	
	Mean Difference	1.07	1.07	
	Std. Error Difference	.575	.618	
	95% Confidence Interval of the Difference	Lower	-.065	-.153
		Upper	2.196	2.284

Table E.19a

Time Preferred on Consulting, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Time preferred on consulting	Research or Doctoral	122	2.12	4.798	.434
	Comprehensive or Liberal Arts	225	4.33	10.214	.681

Table E.19b

Time Preferred on Consulting, by Type of Institution

		Time preferred on consulting		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	11.937		
	Sig.	.001		
t-test for Equality of Means	t	-2.258	-2.737	
	df	345	339.364	
	Sig. (2-tailed)	.025	.007	
	Mean Difference	-2.21	-2.21	
	Std. Error Difference	.979	.808	
	95% Confidence Interval of the Difference	Lower	-4.136	-3.799
		Upper	-.285	-.622

Table E.20a

Number of Undergraduate Committees Served On, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
No. undergrad cmtees served on	Research or Doctoral	122	.51	1.673	.151
	Comprehensive or Liberal Arts	225	.44	1.558	.104

Table E.20b

Number of Undergraduate Committees Served On, by Type of Institution

		No. undergrad cmtees served on	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.396	
	Sig.	.530	
t-test for Equality of Means	t	.355	.347
	df	345	233.667
	Sig. (2-tailed)	.723	.729
	Mean Difference	.06	.06
	Std. Error Difference	.180	.184
	95% Confidence Interval of the Difference	Lower Upper	-.290 .417

Table E.21a

Number of Graduate Committees Served On, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
No. grad cmtees served on	Research or Doctoral	122	4.07	9.883	.895
	Comprehensive or Liberal Arts	225	1.40	4.756	.317

Table E.21b

Number of Graduate Committees Served On, by Type of Institution

		No. grad cmtees served on	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	15.035	
	Sig.	.000	
t-test for Equality of Means	t	3.395	2.813
	df	345	151.992
	Sig. (2-tailed)	.001	.006
	Mean Difference	2.67	2.67
	Std. Error Difference	.787	.949
	95% Confidence Interval of the Difference	Lower Upper	1.123 4.217

Table E.22a

Number of Undergraduate Committees Chaired, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
No. undergrad cmtees chaired	Research or Doctoral	122	.22	.787	.071
	Comprehensive or Liberal Arts	225	.21	.924	.062

Table E.22b

Number of Undergraduate Committees Chaired, by Type of Institution

		No. undergrad cmtees chaired		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.062		
	Sig.	.803		
	t	.126	.132	
	df	345	283.668	
t-test for Equality of Means	Sig. (2-tailed)	.900	.895	
	Mean Difference	.01	.01	
	Std. Error Difference	.099	.094	
	95% Confidence Interval of the Difference	Lower	-.182	-.173
		Upper	.207	.198

Table E.23a

Number of Graduate Committees Chaired, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
No. grad cmtees chaired	Research or Doctoral	122	1.71	4.532	.410
	Comprehensive or Liberal Arts	225	.59	2.465	.164

Table E.23b

Number of Graduate Committees Chaired, by Type of Institution

		No. grad cmtees chaired	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	19.452	
	Sig.	.000	
t-test for Equality of Means	t	3.001	2.549
	df	345	160.688
	Sig. (2-tailed)	.003	.012
	Mean Difference	1.13	1.13
	Std. Error Difference	.375	.442
	95% Confidence Interval of the Difference	Lower Upper	.388 1.865

Table E.24a

Total Classes Taught, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Total classes taught	Research or Doctoral	122	2.71	1.688	.153
	Comprehensive or Liberal Arts	225	3.83	2.303	.154

Table E.24b

Total Classes Taught, by Type of Institution

		Total classes taught	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.424	
	Sig.	.515	
t-test for Equality of Means	t	-4.698	-5.139
	df	345	315.077
	Sig. (2-tailed)	.000	.000
	Mean Difference	-1.11	-1.11
	Std. Error Difference	.237	.217
	95% Confidence Interval of the Difference	Lower Upper	-1.580 -.647

Table E.25a

Total Courses Taught, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Total courses taught	Research or Doctoral	64	2.11	1.071	.134
	Comprehensive or Liberal Arts	79	2.85	1.099	.124

Table E.25b

Total Courses Taught, by Type of Institution

		Total courses taught	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.139	
	Sig.	.710	
t-test for Equality of Means	t	-4.043	-4.054
	df	141	136.250
	Sig. (2-tailed)	.000	.000
	Mean Difference	-.74	-.74
	Std. Error Difference	.183	.182
	95% Confidence Interval of the Difference	Lower Upper	-1.100 -.378

Table E.26a

Remedial Classes Taught, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Remedial classes taught	Research or Doctoral	64	.11	.538	.067
	Comprehensive or Liberal Arts	79	.10	.441	.050

Table E.26b
Remedial Classes Taught, by Type of Institution

		Remedial classes taught		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.042		
	Sig.	.838		
t-test for Equality of Means	t	.099	.097	
	df	141	121.291	
	Sig. (2-tailed)	.921	.923	
	Mean Difference	.01	.01	
	Std. Error Difference	.082	.084	
	95% Confidence Interval of the Difference	Lower	-.154	-.157
	Upper	.170	.174	

Table E.27a
Continuing Education Classes Taught, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Classes taught, continuing education	Research or Doctoral	64	.06	.302	.038
	Comprehensive or Liberal Arts	79	.27	1.071	.120

Table E.27b
Continuing Education Classes Taught, by Type of Institution

		Classes taught, continuing education		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	8.414		
	Sig.	.004		
t-test for Equality of Means	t	-1.472	-1.611	
	df	141	92.973	
	Sig. (2-tailed)	.143	.111	
	Mean Difference	-.20	-.20	
	Std. Error Difference	.138	.126	
	95% Confidence Interval of the Difference	Lower	-.476	-.454
	Upper	.070	.047	

Table E.28a

Total Office Hours Per Week, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Total office hours week	Research or Doctoral	122	5.56	5.666	.513
	Comprehensive or Liberal Arts	225	7.16	5.667	.378

Table E.28b

Total Office Hours Per Week, by Type of Institution

		Total office hours/week		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.380		
	Sig.	.538		
t-test for Equality of Means	t	-2.522	-2.523	
	df	345	248.417	
	Sig. (2-tailed)	.012	.012	
	Mean Difference	-1.61	-1.61	
	Std. Error Difference	.637	.637	
	95% Confidence Interval of the Difference	Lower	-2.860	-2.862
		Upper	-.354	-.352

Table E.29a

Any Creative Work / Writing / Research, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Any creative work/writing/research	Research or Doctoral	122	1.24	.427	.039
	Comprehensive or Liberal Arts	225	1.44	.497	.033

Table E.29b

Any Creative Work / Writing / Research. by Type of Institution

		Any creative work/writing research		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	67.431		
	Sig.	.000		
t-test for Equality of Means	t	-3.795	-3.969	
	df	345	281.888	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	-.20	-.20	
	Std. Error Difference	.053	.051	
	95% Confidence Interval of the Difference	Lower	-.307	-.303
		Upper	-.097	-.102

Table E.30a

Any Funded Research. by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Any funded research	Research or Doctoral	122	2.03	1.396	.126
	Comprehensive or Liberal Arts	225	2.84	1.854	.124

Table E.30b

Any Funded Research. by Type of Institution

		Any funded research		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	45.341		
	Sig.	.000		
t-test for Equality of Means	t	-4.229	-4.592	
	df	345	309.890	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	-.81	-.81	
	Std. Error Difference	.192	.177	
	95% Confidence Interval of the Difference	Lower	-1.189	-1.159
		Upper	-.434	-.464

Table E.31a

Principal Investigator/Co-Principal Investigator on Grants, Contracts, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
PI Co-PI on any grants or contracts	Research or Doctoral	122	3.02	2.126	.192
	Comprehensive or Liberal Arts	225	4.13	2.135	.142

Table E.31b

Principal Investigator/Co-Principal Investigator on Grants, Contracts, by Type of Institution

		PI Co-PI on any grants or contracts	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	4.932	
	Sig.	.027	
t-test for Equality of Means	t	-4.607	-4.613
	df	345	249.271
	Sig. (2-tailed)	.000	.000
	Mean Difference	-1.10	-1.10
	Std. Error Difference	.240	.239
	95% Confidence Interval of the Difference	Lower Upper	-1.576 -.633

Table E.32a

Funds for Tuition Remission, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Internal tuition remission funds	Research or Doctoral	122	2.40	.933	.084
	Comprehensive or Liberal Arts	225	2.57	.783	.052

Table E.32b

Funds for Tuition Remission, by Type of Institution

		Funds for tuition remission		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	39.858		
	Sig.	.000		
t-test for Equality of Means	t	-3.146	-2.805	
	df	345	180.779	
	Sig. (2-tailed)	.002	.006	
	Mean Difference	-.11	-.11	
	Std. Error Difference	.035	.039	
	95% Confidence Interval of the Difference	Lower	-.178	-.186
		Upper	-.041	-.032

Table E.33a

Funds for Professional Association Memberships, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Internal prof. assoc. funds	Research or Doctoral	122	2.60	.951	.086
	Comprehensive or Liberal Arts	225	2.37	.987	.066

Table E.33b

Funds for Professional Association Memberships, by Type of Institution

		Funds for professional associations		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	15.925		
	Sig.	.000		
t-test for Equality of Means	t	1.875	1.945	
	df	345	275.424	
	Sig. (2-tailed)	.062	.053	
	Mean Difference	.09	.09	
	Std. Error Difference	.050	.048	
	95% Confidence Interval of the Difference	Lower	-.005	-.001
		Upper	.190	.187

Table E.34a

Funds for Professional Travel, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Internal prof. travel funds	Research or Doctoral	122	1.75	.887	.080
	Comprehensive or Liberal Arts	225	1.64	.817	.054

Table E.34b

Funds for Professional Travel, by Type of Institution

		Funds for professional travel	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	1.385	
	Sig.	.240	
t-test for Equality of Means	t	.711	.709
	df	345	246.428
	Sig. (2-tailed)	.478	.479
	Mean Difference	.04	.04
	Std. Error Difference	.056	.056
	95% Confidence Interval of the Difference	Lower Upper	-.070 .150

Table E.35a

Funds for Training to Improve Research or Teaching, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Internal training to improve res teaching	Research or Doctoral	122	2.48	.911	.082
	Comprehensive or Liberal Arts	225	2.34	.868	.058

Table E.35b

Funds for Training to Improve Research or Teaching, by Type of Institution

		Funds for training to improve research, teaching		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.509		
	Sig.	.476		
t-test for Equality of Means	t	.354	.357	
	df	345	254.540	
	Sig. (2-tailed)	.724	.722	
	Mean Difference	.02	.02	
	Std. Error Difference	.045	.045	
	95% Confidence Interval of the Difference	Lower	-.073	-.072
		Upper	.104	.104

Table E.36a

Funds for Sabbatical Leave, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Internal sabbatical leave	Research or Doctoral	122	2.47	.729	.066
	Comprehensive or Liberal Arts	225	2.57	.692	.046

Table E.36b

Funds for Sabbatical Leave, by Type of Institution

		Funds for sabbatical leave		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	4.322		
	Sig.	.038		
t-test for Equality of Means	t	-1.044	-.984	
	df	345	209.723	
	Sig. (2-tailed)	.297	.326	
	Mean Difference	-.03	-.03	
	Std. Error Difference	.027	.029	
	95% Confidence Interval of the Difference	Lower	-.083	-.086
		Upper	.025	.029

Table E.37a

Satisfaction with Authority to Decide Course Content, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w authority to decide course content	Research or Doctoral	122	3.61	1.250	.113
	Comprehensive or Liberal Arts	225	3.49	1.430	.095

Table E.37b

Satisfaction with Authority to Decide Course Content, by Type of Institution

		Satis w authority to decide course content	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.924	
	Sig.	.337	
t-test for Equality of Means	t	.735	.765
	df	345	278.045
	Sig. (2-tailed)	.463	.445
	Mean Difference	.11	.11
	Std. Error Difference	.154	.148
	95% Confidence Interval of the Difference	Lower Upper	-.190 .416

Table E.38a

Satisfaction with Authority to Decide Courses Taught, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w authority to decide courses taught	Research or Doctoral	122	2.93	1.506	.136
	Comprehensive or Liberal Arts	225	3.01	1.544	.103

Table E.38b

Satisfaction with Authority to Decide Courses Taught, by Type of Institution

		Satis w/authority to decide courses taught	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.127	
	Sig.	.722	
t-test for Equality of Means	t	-.480	-.484
	df	345	253.744
	Sig. (2-tailed)	.631	.629
	Mean Difference	-.08	-.08
	Std. Error Difference	.172	.171
	95% Confidence Interval of the Difference	Lower Upper	-.421 .256

Table E.39a

Satisfaction with Authority to Make Other Job Decisions, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w/authority make other job decisions	Research or Doctoral	122	2.80	1.661	.150
	Comprehensive or Liberal Arts	225	2.58	1.715	.114

Table E.39b

Satisfaction with Authority to Make Other Job Decisions, by Type of Institution

		Satis w/authority make other job decision	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.626	
	Sig.	.429	
t-test for Equality of Means	t	1.139	1.150
	df	345	255.242
	Sig. (2-tailed)	.255	.251
	Mean Difference	.22	.22
	Std. Error Difference	.191	.189
	95% Confidence Interval of the Difference	Lower Upper	-.158 .592

Table E.40a

Satisfaction with Time Available to Advise Students, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w time available to advise students	Research or Doctoral	122	2.88	1.491	.135
	Comprehensive or Liberal Arts	225	2.91	1.516	.101

Table E.40b

Satisfaction with Time Available to Advise Students, by Type of Institution

		Satis w time available to advise students		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.070		
	Sig.	.792		
	t	-.175	-.176	
	df	345	251.900	
t-test for Equality of Means	Sig. (2-tailed)	.861	.861	
	Mean Difference	-.03	-.03	
	Std. Error Difference	.170	.169	
	95% Confidence Interval of the Difference	Lower	-.363	-.362
		Upper	.304	.303

Table E.41a

Satisfaction with Quality of Undergraduate Students, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w quality of undergrad students	Research or Doctoral	122	2.34	1.748	.158
	Comprehensive or Liberal Arts	225	2.38	1.588	.106

Table E.41b

Satisfaction with Quality of Undergraduate Students, by Type of Institution

		Satis w quality of undergrad students		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.198		
	Sig.	.657		
t-test for Equality of Means	t	-.205	-.199	
	df	345	228.869	
	Sig. (2-tailed)	.838	.842	
	Mean Difference	-.04	-.04	
	Std. Error Difference	.185	.190	
	95% Confidence Interval of the Difference	Lower	-.402	-.413
		Upper	.326	.337

Table E.42a

Satisfaction with Quality of Graduate Students, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w quality of graduate students	Research or Doctoral	122	1.88	2.804	.254
	Comprehensive or Liberal Arts	225	-.64	3.923	.262

Table E.42b

Satisfaction with Quality of Graduate Students, by Type of Institution

		Satis w quality of graduate students		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	158.172		
	Sig.	.000		
t-test for Equality of Means	t	6.269	6.906	
	df	345	319.677	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	2.52	2.52	
	Std. Error Difference	.401	.364	
	95% Confidence Interval of the Difference	Lower	1.727	1.800
		Upper	3.307	3.234

Table E.43a

Satisfaction with Workload, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w workload	Research or Doctoral	122	2.79	.902	.082
	Comprehensive or Liberal Arts	225	2.68	.957	.064

Table E.43b

Satisfaction with Workload, by Type of Institution

		Satis w workload	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	2.358	
	Sig.	.126	
t-test for Equality of Means	t	1.014	1.032
	df	345	261.101
	Sig. (2-tailed)	.311	.303
	Mean Difference	.11	.11
	Std. Error Difference	.105	.104
	95% Confidence Interval of the Difference	Lower Upper	-.101 .314

Table E.44a

Satisfaction with Advancement Opportunities, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w advancement opportunity	Research or Doctoral	122	2.80	.979	.089
	Comprehensive or Liberal Arts	225	2.69	.972	.065

Table E.44b

Satisfaction with Advancement Opportunities, by Type of Institution

		Satis w advancement opportunity	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.015	
	Sig.	.903	
t-test for Equality of Means	t	.929	.927
	df	345	247.016
	Sig. (2-tailed)	.354	.355
	Mean Difference	.10	.10
	Std. Error Difference	.110	.110
	95% Confidence Interval of the Difference	Lower Upper	-.114 .317

Table E.45a

Satisfaction with Time to Keep Current in Field, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w time to keep current in field	Research or Doctoral	122	2.43	.891	.081
	Comprehensive or Liberal Arts	225	2.18	.910	.061

Table E.45b

Satisfaction with Time to Keep Current in Field, by Type of Institution

		Satis w time to keep current in field	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.124	
	Sig.	.725	
t-test for Equality of Means	t	2.483	2.499
	df	345	252.993
	Sig. (2-tailed)	.013	.013
	Mean Difference	.25	.25
	Std. Error Difference	.102	.101
	95% Confidence Interval of the Difference	Lower Upper	.052 .452

Table E.46a

Satisfaction with Freedom to Do Consulting, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w freedom to do consulting	Research or Doctoral	122	3.17	.789	.071
	Comprehensive or Liberal Arts	225	3.01	.906	.060

Table E.46b

Satisfaction with Freedom to Do Consulting, by Type of Institution

		Satis w freedom to do consulting	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.737	
	Sig.	.391	
t-test for Equality of Means	t	1.675	1.744
	df	345	278.850
	Sig. (2-tailed)	.095	.082
	Mean Difference	.16	.16
	Std. Error Difference	.097	.094
	95% Confidence Interval of the Difference	Lower Upper	-.028 .355

Table E.47a

Satisfaction with Job Overall, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w job overall	Research or Doctoral	122	2.92	.734	.066
	Comprehensive or Liberal Arts	225	2.94	.791	.053

Table E.47b
Satisfaction with Job Overall. by Type of Institution

		Satis w/ job overall		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.079		
	Sig.	.778		
t-test for Equality of Means	t	-.279	-.285	
	df	345	264.768	
	Sig. (2-tailed)	.781	.776	
	Mean Difference	-.02	-.02	
	Std. Error Difference	.087	.085	
	95% Confidence Interval of the Difference	Lower	-.195	-.191
		Upper	.146	.143

Table E.48a
How Important Advancement Opportunities. by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: advancement opportunities?	Research or Doctoral	122	2.43	.667	.060
	Comprehensive or Liberal Arts	225	2.44	.680	.045

Table E.48b
How Important Advancement Opportunities. by Type of Institution

		How important: advancement opportunity		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.102		
	Sig.	.750		
t-test for Equality of Means	t	-.240	-.241	
	df	345	252.462	
	Sig. (2-tailed)	.811	.810	
	Mean Difference	-.02	-.02	
	Std. Error Difference	.076	.076	
	95% Confidence Interval of the Difference	Lower	-.168	-.167
		Upper	.131	.130

Table E.49a

How Important No Pressure to Publish, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: no pressure to publish?	Research or Doctoral	122	1.78	.710	.064
	Comprehensive or Liberal Arts	225	2.10	.770	.051

Table E.49b

How Important No Pressure to Publish, by Type of Institution

		How important: no pressure to publish	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.420	
	Sig.	.517	
t-test for Equality of Means	t	-3.841	-3.933
	df	345	265.899
	Sig. (2-tailed)	.000	.000
	Mean Difference	-.32	-.32
	Std. Error Difference	.084	.082
	95% Confidence Interval of the Difference	Lower Upper	-.489 -.158

Table E.50a

How Important Teaching Opportunities, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: teaching opportunities?	Research or Doctoral	122	1.97	.749	.068
	Comprehensive or Liberal Arts	225	2.09	.768	.051

Table E.50b

How Important Teaching Opportunities, by Type of Institution

		How important: teaching opportunity		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.044		
	Sig.	.308		
t-test for Equality of Means	t	-1.421	-1.432	
	df	345	253.842	
	Sig. (2-tailed)	.156	.153	
	Mean Difference	-.12	-.12	
	Std. Error Difference	.086	.085	
	95% Confidence Interval of the Difference	Lower	-.290	-.289
		Upper	.047	.046

Table E.51a

How Important Research Opportunities, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: research opportunities?	Research or Doctoral	122	2.16	.843	.076
	Comprehensive or Liberal Arts	225	1.98	.767	.051

Table E.51b

How Important Research Opportunities, by Type of Institution

		How important: research opportunity		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	9.141		
	Sig.	.003		
t-test for Equality of Means	t	1.942	1.888	
	df	345	229.125	
	Sig. (2-tailed)	.053	.060	
	Mean Difference	.17	.17	
	Std. Error Difference	.089	.092	
	95% Confidence Interval of the Difference	Lower	-.002	-.008
		Upper	.349	.355

Table E.52a

Academic Rank, Title, or Job, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Academic rank, title or job	Research or Doctoral	122	2.66	1.353	.123
	Comprehensive or Liberal Arts	225	2.56	1.133	.076

Table E.52b

Academic Rank, Title, or Job, by Type of Institution

		Academic rank, title or job	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	3.377	
	Sig.	.067	
t-test for Equality of Means	t	.669	.634
	df	345	213.726
	Sig. (2-tailed)	.504	.526
	Mean Difference	.09	.09
	Std. Error Difference	.137	.144
	95% Confidence Interval of the Difference	Lower Upper	-.177 .360

Table E.53a

Number of Years in Current Job, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Years in current job	Research or Doctoral	122	9.33	8.303	.752
	Comprehensive or Liberal Arts	225	9.93	8.423	.562

Table E.53b

Number of Years in Current Job, by Type of Institution

		Years in current job	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.048	
	Sig.	.826	
t-test for Equality of Means	t	-.643	-.645
	df	345	251.435
	Sig. (2-tailed)	.521	.519
	Mean Difference	-.61	-.61
	Std. Error Difference	.942	.938
	95% Confidence Interval of the Difference	Lower Upper	-2.459 1.248

Table E.54a

Years Teaching in Higher Education Institutions, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Years teaching in higher ed institutions	Research or Doctoral	65	15.03	9.134	1.133
	Comprehensive or Liberal Arts	80	14.65	9.450	1.056

Table E.54b

Years Teaching in Higher Education Institutions, by Type of Institution

		Years teaching in higher ed institutions	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.013	
	Sig.	.908	
t-test for Equality of Means	t	.245	.246
	df	143	138.720
	Sig. (2-tailed)	.807	.806
	Mean Difference	.38	.38
	Std. Error Difference	1.555	1.549
	95% Confidence Interval of the Difference	Lower Upper	-2.692 3.454

Table E.55a

Employed Only at Current Institution, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Employed only at current institution	Research or Doctoral	122	1.34	.477	.043
	Comprehensive or Liberal Arts	225	1.29	.454	.030

Table E.55b

Employed Only at Current Institution, by Type of Institution

		Employed only at current institution	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	4.128	
	Sig.	.043	
t-test for Equality of Means	t	1.065	1.050
	df	345	238.117
	Sig. (2-tailed)	.288	.295
	Mean Difference	.06	.06
	Std. Error Difference	.052	.053
	95% Confidence Interval of the Difference	Lower Upper	-.047 .158

Table E.56a

Other Employment--Number of Positions, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Other employment, number of positions	Research or Doctoral	71	.69	1.178	.140
	Comprehensive or Liberal Arts	108	.73	.982	.095

Table E.56b

Other Employment--Number of Positions, by Type of Institution

		Other employment, number of positions		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.416		
	Sig.	.520		
t-test for Equality of Means	t	-.254	-.245	
	df	177	130.711	
	Sig. (2-tailed)	.800	.807	
	Mean Difference	-.04	-.04	
	Std. Error Difference	.163	.169	
	95% Confidence Interval of the Difference	Lower	-.362	-.375
		Upper	.279	.293

Table E.57a

Rating of Research Equipment and Instruments, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Rating of research equip instruments	Research or Doctoral	122	3.20	1.113	.101
	Comprehensive or Liberal Arts	225	2.84	1.375	.092

Table E.57b

Rating of Research Equipment and Instruments, by Type of Institution

		Rating of research equipment, instruments		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	9.317		
	Sig.	.002		
t-test for Equality of Means	t	2.487	2.646	
	df	345	295.025	
	Sig. (2-tailed)	.013	.009	
	Mean Difference	.36	.36	
	Std. Error Difference	.145	.136	
	95% Confidence Interval of the Difference	Lower	.075	.092
		Upper	.646	.629

Table E.58a

Rating of Laboratory Space and Supplies, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Rating of laboratory space and supplies	Research or Doctoral	122	3.11	1.280	.116
	Comprehensive or Liberal Arts	225	2.93	1.319	.088

Table E.58b

Rating of Laboratory Space and Supplies, by Type of Institution

		Rating of laboratory space and supplies		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.001		
	Sig.	.976		
t-test for Equality of Means	t	1.236	1.247	
	df	345	254.818	
	Sig. (2-tailed)	.217	.214	
	Mean Difference	.18	.18	
	Std. Error Difference	.147	.146	
	95% Confidence Interval of the Difference	Lower	-.107	-.105
		Upper	.470	.468

Table E.59a

Rating of Availability of Research Assistants, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Rating of avail of research assistants	Research or Doctoral	122	2.75	1.417	.128
	Comprehensive or Liberal Arts	225	3.14	1.769	.118

Table E.59b

Rating of Availability of Research Assistants, by Type of Institution

		Rating of availability of research assistants	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	40.302	
	Sig.	.000	
t-test for Equality of Means	t	-2.107	-2.249
	df	345	297.138
	Sig. (2-tailed)	.036	.025
	Mean Difference	-.39	-.39
	Std. Error Difference	.186	.174
	95% Confidence Interval of the Difference	Lower Upper	-.758 -.026

Table E.60a

Rating of Computers and Local Networks, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Rating of computers and local networks	Research or Doctoral	122	3.23	.925	.084
	Comprehensive or Liberal Arts	225	3.10	.925	.062

Table E.60b

Rating of Computers and Local Networks, by Type of Institution

		Rating of computers and local networks	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.690	
	Sig.	.407	
t-test for Equality of Means	t	1.266	1.266
	df	345	248.411
	Sig. (2-tailed)	.206	.207
	Mean Difference	.13	.13
	Std. Error Difference	.104	.104
	95% Confidence Interval of the Difference	Lower Upper	-.073 .336

Table E.61a

Rating of Centralized Computer Facilities, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Rating of centralized computer facilities	Research or Doctoral	122	3.43	1.143	.103
	Comprehensive or Liberal Arts	225	2.92	1.168	.078

Table E.61b

Rating of Centralized Computer Facilities, by Type of Institution

		Rating of centralized computer facilities	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.731	
	Sig.	.393	
t-test for Equality of Means	t	3.913	3.938
	df	345	253.117
	Sig. (2-tailed)	.000	.000
	Mean Difference	.51	.51
	Std. Error Difference	.130	.129
	95% Confidence Interval of the Difference	Lower Upper	.254 .766

Table E.62a

Rating of Internet Connections, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Rating of Internet connections	Research or Doctoral	122	3.34	.934	.085
	Comprehensive or Liberal Arts	225	3.06	1.120	.075

Table E.62b

Rating of Internet Connections. by Type of Institution

		Rating of Internet connections		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.108		
	Sig.	.293		
t-test for Equality of Means	t	2.369	2.500	
	df	345	288.573	
	Sig. (2-tailed)	.018	.013	
	Mean Difference	.28	.28	
	Std. Error Difference	.119	.113	
	95% Confidence Interval of the Difference	Lower	.048	.060
		Upper	.516	.504

Table E.63a

Rating of Audio-visual Equipment. by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Rating of audio-visual equipment	Research or Doctoral	122	2.93	1.010	.091
	Comprehensive or Liberal Arts	225	2.80	.965	.064

Table E.63b

Rating of Audio-visual Equipment. by Type of Institution

		Rating of audio-visual equipment		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.007		
	Sig.	.935		
t-test for Equality of Means	t	1.259	1.242	
	df	345	238.788	
	Sig. (2-tailed)	.209	.215	
	Mean Difference	.14	.14	
	Std. Error Difference	.110	.112	
	95% Confidence Interval of the Difference	Lower	-.078	-.081
		Upper	.356	.359

Table E.64a

Rating of Classroom Space, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Rating of classroom space	Research or Doctoral	122	2.73	.918	.083
	Comprehensive or Liberal Arts	225	2.87	.840	.056

Table E.64b

Rating of Classroom Space, by Type of Institution

		Rating of classroom space	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	2.952	
	Sig.	.087	
t-test for Equality of Means	t	-1.405	-1.368
	df	345	230.046
	Sig. (2-tailed)	.161	.173
	Mean Difference	-.14	-.14
	Std. Error Difference	.098	.100
	95% Confidence Interval of the Difference	Lower Upper	-.329 .055

Table E.65a

Rating of Office Space, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Rating of office space	Research or Doctoral	122	2.86	.894	.081
	Comprehensive or Liberal Arts	225	2.91	.978	.065

Table E.65b

Rating of Office Space, by Type of Institution

		Rating of office space		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.218		
	Sig.	.641		
t-test for Equality of Means	t	-.473	-.486	
	df	345	268.094	
	Sig. (2-tailed)	.637	.628	
	Mean Difference	-.05	-.05	
	Std. Error Difference	.107	.104	
	95% Confidence Interval of the Difference	Lower	-.260	-.255
		Upper	.159	.154

Table E.66a

Rating of Secretarial Support, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Rating of secretarial support	Research or Doctoral	122	2.64	1.068	.097
	Comprehensive or Liberal Arts	225	2.67	1.106	.074

Table E.66b

Rating of Secretarial Support, by Type of Institution

		Rating of secretarial support		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.021		
	Sig.	.885		
t-test for Equality of Means	t	-.222	-.225	
	df	345	255.802	
	Sig. (2-tailed)	.824	.822	
	Mean Difference	-.03	-.03	
	Std. Error Difference	.123	.122	
	95% Confidence Interval of the Difference	Lower	-.269	-.267
		Upper	.214	.212

Table E.67a

Rating of Library Holdings, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Rating of library holdings	Research or Doctoral	122	2.68	1.054	.095
	Comprehensive or Liberal Arts	225	2.52	1.018	.068

Table E.67b

Rating of Library Holdings, by Type of Institution

		Rating of library holdings		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.011		
	Sig.	.917		
	t	1.345	1.331	
	df	345	240.955	
t-test for Equality of Means	Sig. (2-tailed)	.180	.184	
	Mean Difference	.16	.16	
	Std. Error Difference	.116	.117	
	95% Confidence Interval of the Difference	Lower	-.072	-.075
		Upper	.384	.387

Table E.68a

Satisfaction with Job Security, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w job security	Research or Doctoral	122	3.10	.966	.087
	Comprehensive or Liberal Arts	225	3.16	.969	.065

Table E.68b

Satisfaction with Job Security: by Type of Institution

		Satis w job security		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.199		
	Sig.	.656		
t-test for Equality of Means	t	-.567	-.567	
	df	345	249.055	
	Sig. (2-tailed)	.571	.571	
	Mean Difference	-.06	-.06	
	Std. Error Difference	.109	.109	
	95% Confidence Interval of the Difference	Lower	-.276	-.276
		Upper	.152	.152

Table E.69a

Satisfaction with Salary: by Type of Institution

		N	Mean	Std. Deviation	Std. Error Mean
Satis w salary	Institutional type				
	Research or Doctoral	122	2.34	.934	.085
	Comprehensive or Liberal Arts	225	2.28	.928	.062

Table E.69b

Satisfaction with Salary: by Type of Institution

		Satis w salary		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.002		
	Sig.	.961		
t-test for Equality of Means	t	.657	.656	
	df	345	247.000	
	Sig. (2-tailed)	.512	.513	
	Mean Difference	.07	.07	
	Std. Error Difference	.105	.105	
	95% Confidence Interval of the Difference	Lower	-.137	-.138
		Upper	.274	.275

Table E.70a

Satisfaction with Benefits, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w benefits	Research or Doctoral	122	2.87	.833	.075
	Comprehensive or Liberal Arts	225	2.78	.909	.061

Table E.70b

Satisfaction with Benefits, by Type of Institution

		Satis w benefits		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.254		
	Sig.	.134		
t-test for Equality of Means	t	.918	.942	
	df	345	267.424	
	Sig. (2-tailed)	.359	.347	
	Mean Difference	.09	.09	
	Std. Error Difference	.099	.097	
	95% Confidence Interval of the Difference	Lower	-.104	-.099
		Upper	.286	.281

Table E.71a

Satisfaction with Job Opportunities for Spouse, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Satis w spouse emp opportunity	Research or Doctoral	122	2.22	2.478	.224
	Comprehensive or Liberal Arts	225	2.06	2.456	.164

Table E.71b

Satisfaction with Job Opportunities for Spouse, by Type of Institution

		Satis w/spouse job opportunity	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.067	
	Sig.	.796	
	t	.574	.573
	df	345	246.451
	Sig. (2-tailed)	.566	.567
t-test for Equality of Means	Mean Difference	.16	.16
	Std. Error Difference	.277	.278
	95% Confidence Interval of the Difference	Lower Upper	Lower Upper
		-.386 .704	-.388 .706

Table E.72a

How Important Salary Level, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: salary level?	Research or Doctoral	122	2.48	.578	.052
	Comprehensive or Liberal Arts	225	2.54	.574	.038

Table E.72b

How Important Salary Level, by Type of Institution

		How important: salary	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.143	
	Sig.	.705	
	t	-1.033	-1.030
	df	345	246.936
	Sig. (2-tailed)	.303	.304
t-test for Equality of Means	Mean Difference	-.07	-.07
	Std. Error Difference	.065	.065
	95% Confidence Interval of the Difference	Lower Upper	Lower Upper
		-.194 .060	-.195 .061

Table E.73a

How Important Tenure, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: tenure?	Research or Doctoral	122	2.41	.724	.066
	Comprehensive or Liberal Arts	225	2.31	.823	.055

Table E.73b

How Important Tenure, by Type of Institution

		How important: tenure	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	6.659	
	Sig.	.010	
t-test for Equality of Means	t	1.161	1.206
	df	345	276.548
	Sig. (2-tailed)	.246	.229
	Mean Difference	.10	.10
	Std. Error Difference	.089	.086
	95% Confidence Interval of the Difference	Lower Upper	-.072 .278

Table E.74a

How Important Job Security, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: job security?	Research or Doctoral	122	2.61	.539	.049
	Comprehensive or Liberal Arts	225	2.53	.648	.043

Table E.74b

How Important Job Security: by Type of Institution

		How important: job security		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	7.526		
	Sig.	.006		
t-test for Equality of Means	t	1.129	1.192	
	df	345	289.192	
	Sig. (2-tailed)	.260	.234	
	Mean Difference	.08	.08	
	Std. Error Difference	.069	.065	
	95% Confidence Interval of the Difference	Lower	-.058	-.051
		Upper	.213	.206

Table E.75a

How Important Benefits: by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: benefits?	Research or Doctoral	122	2.53	.592	.054
	Comprehensive or Liberal Arts	225	2.59	.568	.038

Table E.75b

How Important Benefits: by Type of Institution

		How important: benefits		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.117		
	Sig.	.291		
t-test for Equality of Means	t	-.899	-.889	
	df	345	239.937	
	Sig. (2-tailed)	.369	.375	
	Mean Difference	-.06	-.06	
	Std. Error Difference	.065	.066	
	95% Confidence Interval of the Difference	Lower	-.186	-.188
		Upper	.069	.071

Table E.76a

How Important Research Facilities, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: research facilities?	Research or Doctoral	122	2.47	.645	.058
	Comprehensive or Liberal Arts	225	2.28	.729	.049

Table E.76b

How Important Research Facilities, by Type of Institution

		How important: research facilities	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	2.072	
	Sig.	.151	
t-test for Equality of Means	t	2.434	2.523
	df	345	275.135
	Sig. (2-tailed)	.015	.012
	Mean Difference	.19	.19
	Std. Error Difference	.079	.076
	95% Confidence Interval of the Difference	Lower Upper	.037 .347

Table E.77a

How Important Instructional Facilities, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: instructional facilities?	Research or Doctoral	122	2.55	.562	.051
	Comprehensive or Liberal Arts	225	2.60	.582	.039

Table E.77b

How Important Instructional Facilities, by Type of Institution

		How important: instructional facilities		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.043		
	Sig.	.836		
	t	-.786	-.794	
	df	345	256.113	
t-test for Equality of Means	Sig. (2-tailed)	.433	.428	
	Mean Difference	-.05	-.05	
	Std. Error Difference	.065	.064	
	95% Confidence Interval of the Difference	Lower	-.178	-.177
		Upper	.076	.075

Table E.78a

How Important Spouse Employment Opportunities, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: job for spouse?	Research or Doctoral	122	1.59	2.222	.201
	Comprehensive or Liberal Arts	225	1.72	1.940	.129

Table E.78b

How Important Spouse Employment Opportunities, by Type of Institution

		How important: job for spouse		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.341		
	Sig.	.127		
	t	-.565	-.543	
	df	345	221.296	
t-test for Equality of Means	Sig. (2-tailed)	.572	.588	
	Mean Difference	-.13	-.13	
	Std. Error Difference	.230	.239	
	95% Confidence Interval of the Difference	Lower	-.582	-.601
		Upper	.322	.342

Table E.79a

How Important Geographic Location, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: geographic location?	Research or Doctoral	122	2.52	.592	.054
	Comprehensive or Liberal Arts	225	2.48	.620	.041

Table E.79b

How Important Geographic Location, by Type of Institution

		How important: geographic location	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.666	
	Sig.	.415	
t-test for Equality of Means	t	.595	.603
	df	345	258.214
	Sig. (2-tailed)	.552	.547
	Mean Difference	.04	.04
	Std. Error Difference	.069	.068
	95% Confidence Interval of the Difference	Lower Upper	-.094 .176

Table E.80a

How Important Good Schools for Children, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How important: schools for kids?	Research or Doctoral	122	1.16	2.633	.238
	Comprehensive or Liberal Arts	225	1.19	2.529	.169

Table E.80b

How Important Good Schools for Children, by Type of Institution

		How important: good schools for kids		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.255		
	Sig.	.614		
t-test for Equality of Means	t	-.079	-.078	
	df	345	239.886	
	Sig. (2-tailed)	.937	.938	
	Mean Difference	-.02	-.02	
	Std. Error Difference	.288	.292	
	95% Confidence Interval of the Difference	Lower	-.590	-.598
		Upper	.545	.552

Table E.81a

Total Income from Institution, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Income from institution	Research or Doctoral	122	5.30	2.244	.203
	Comprehensive or Liberal Arts	225	4.28	1.701	.113

Table E.81b

Total Income from Institution, by Type of Institution

		Income from institution		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	13.490		
	Sig.	.000		
t-test for Equality of Means	t	4.709	4.344	
	df	345	197.726	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	1.01	1.01	
	Std. Error Difference	.215	.233	
	95% Confidence Interval of the Difference	Lower	.588	.552
		Upper	1.433	1.469

Table E.82a

Total Personal Income--All Sources, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Total income all sources	Research or Doctoral	122	5.80	2.356	.213
	Comprehensive or Liberal Arts	225	4.82	1.982	.132

Table E.82b

Total Personal Income--All Sources, by Type of Institution

		Total income all sources		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	7.848		
	Sig.	.005		
t-test for Equality of Means	t	4.099	3.895	
	df	345	214.539	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	.98	.98	
	Std. Error Difference	.238	.251	
	95% Confidence Interval of the Difference	Lower	.508	.483
		Upper	1.446	1.472

Table E.83a

Total Household Income, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Total household income	Research or Doctoral	122	7.68	2.464	.223
	Comprehensive or Liberal Arts	225	6.54	2.610	.174

Table E.83b

Total Household Income, by Type of Institution

		Total household income	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.157	
	Sig.	.692	
t-test for Equality of Means	t	3.955	4.023
	df	345	260.869
	Sig. (2-tailed)	.000	.000
	Mean Difference	1.14	1.14
	Std. Error Difference	.288	.283
	95% Confidence Interval of the Difference	Lower Upper	.572 1.704

Table E.84a

Gender, by Type of Institution

Institutional type		N	Mean	Std. Deviation	Std. Error Mean
Gender	Research or Doctoral	122	1.23	.422	.038
	Comprehensive or Liberal Arts	225	1.24	.431	.029

Table E.84b

Gender, by Type of Institution

		Gender	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.393	
	Sig.	.531	
t-test for Equality of Means	t	-.311	-.312
	df	345	252.612
	Sig. (2-tailed)	.756	.755
	Mean Difference	-.01	-.01
	Std. Error Difference	.048	.048
	95% Confidence Interval of the Difference	Lower Upper	-.110 .080

Table E.85a
Age, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Age	Research or Doctoral	122	2.81	.948	.086
	Comprehensive or Liberal Arts	225	2.90	1.032	.069

Table E.85b
Age, by Type of Institution

		Age		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.018		
	Sig.	.894		
t-test for Equality of Means	t	-.765	-.785	
	df	345	267.048	
	Sig. (2-tailed)	.445	.433	
	Mean Difference	-.09	-.09	
	Std. Error Difference	.113	.110	
	95% Confidence Interval of the Difference	Lower	-.308	-.303
		Upper	.136	.130

Table E.86a
Spouse Employed in Higher Education, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Spouse employed in higher education	Research or Doctoral	55	1.78	.417	.056
	Comprehensive or Liberal Arts	66	1.82	.389	.048

Table E.86b

Spouse Employed in Higher Education, by Type of Institution

		Spouse employed in higher education		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.977		
	Sig.	.325		
t-test for Equality of Means	t	-.496	-.493	
	df	119	111.827	
	Sig. (2-tailed)	.621	.623	
	Mean Difference	-.04	-.04	
	Std. Error Difference	.073	.074	
	95% Confidence Interval of the Difference	Lower	-.182	-.183
		Upper	.109	.110

Table E.87a

Country of Birth, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Country of birth	Research or Doctoral	122	1.31	.465	.042
	Comprehensive or Liberal Arts	225	1.25	.436	.029

Table E.87b

Country of Birth, by Type of Institution

		Country of birth		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	4.965		
	Sig.	.027		
t-test for Equality of Means	t	1.159	1.137	
	df	345	234.956	
	Sig. (2-tailed)	.247	.257	
	Mean Difference	.06	.06	
	Std. Error Difference	.050	.051	
	95% Confidence Interval of the Difference	Lower	-.041	-.043
		Upper	.157	.159

Table E.88a
Citizenship Status, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Citizenship status	Research or Doctoral	122	1.54	.910	.082
	Comprehensive or Liberal Arts	225	1.43	.816	.054

Table E.88b
Citizenship Status, by Type of Institution

		Citizenship status		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	4.476		
	Sig.	.035		
t-test for Equality of Means	t	1.196	1.158	
	df	345	226.114	
	Sig. (2-tailed)	.233	.248	
	Mean Difference	.11	.11	
	Std. Error Difference	.096	.099	
	95% Confidence Interval of the Difference	Lower	-.074	-.080
		Upper	.302	.309

Table E.89a
How Likely to Accept Part-time Postsecondary Job, by Type of Institution

		How likely accept P T pstsec job in 3 yr		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.013		
	Sig.	.911		
t-test for Equality of Means	t	-.188	-.182	
	df	345	227.923	
	Sig. (2-tailed)	.851	.856	
	Mean Difference	-.01	-.01	
	Std. Error Difference	.054	.055	
	95% Confidence Interval of the Difference	Lower	-.116	-.119
		Upper	.096	.099

Table E.89b

How Likely to Accept Part-time Postsecondary Job, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How likely accept P T pstsec job in 3 yr	Research or Doctoral	122	1.17	.509	.046
	Comprehensive or Liberal Arts	225	1.18	.461	.031

Table E.90a

How Likely to Accept Full-time Postsecondary Job, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How likely accept F T pstsec job in 3 yr	Research or Doctoral	122	1.57	.704	.064
	Comprehensive or Liberal Arts	225	1.59	.715	.048

Table E.90b

How Likely to Accept Full-time Postsecondary Job, by Type of Institution

		How likely accept F T pstsec job in 3 yr	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.098	
	Sig.	.755	
t-test for Equality of Means	t		-.265
	df		345
	Sig. (2-tailed)		.791
	Mean Difference		-.02
	Std. Error Difference		.080
	95% Confidence Interval of the Difference	Lower	-.178
	Upper	.136	.136

Table E.91a

How Likely to Accept Part-time Non-postsecondary Job, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How likely accept P T nonpstsec job 3 yr	Research or Doctoral	122	1.20	.475	.043
	Comprehensive or Liberal Arts	225	1.20	.500	.033

Table E.91b

How Likely to Accept Part-time Non-postsecondary Job, by Type of Institution

		How likely accept P T nonpstsec job 3 yr	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.048	
	Sig.	.827	
t-test for Equality of Means	t	-.059	-.060
	df	345	259.565
	Sig. (2-tailed)	.953	.952
	Mean Difference	.00	.00
	Std. Error Difference	.055	.054
	95% Confidence Interval of the Difference	Lower Upper	-.112 .105

Table E.92a

How Likely to Accept Full-time Non-postsecondary Job, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How likely accept F T nonpstsec job 3 yr	Research or Doctoral	122	1.44	.669	.061
	Comprehensive or Liberal Arts	225	1.43	.665	.044

Table E.92b

How Likely to Accept Full-time Non-postsecondary Job, by Type of Institution

		How likely accept F T nonpstsec job 3 yr	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.023	
	Sig.	.879	
t-test for Equality of Means	t	.154	.153
	df	345	247.319
	Sig. (2-tailed)	.878	.878
	Mean Difference	.01	.01
	Std. Error Difference	.075	.075
	95% Confidence Interval of the Difference	Lower Upper	-.136 .159

Table E.93a

How Likely to Retire in Next Three Years, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
How likely retire in 3 years	Research or Doctoral	122	1.11	.359	.033
	Comprehensive or Liberal Arts	225	1.19	.501	.033

Table E.93b

How Likely to Retire in Next Three Years, by Type of Institution

		How likely retire in 3 years		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	10.191		
	Sig.	.002		
t-test for Equality of Means	t	-1.562	-1.719	
	df	345	318.989	
	Sig. (2-tailed)	.119	.087	
	Mean Difference	-.08	-.08	
	Std. Error Difference	.051	.047	
	95% Confidence Interval of the Difference	Lower	-.181	-.172
		Upper	.021	.012

Table E.94a

Age Most Likely to Stop Working at Postsecondary Institution, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Age most likely to stop working at postsecondary institution	Research or Doctoral	89	64.74	6.598	.699
	Comprehensive or Liberal Arts	167	64.45	6.815	.527

Table E.94b

Age Most Likely to Stop Working at Postsecondary Institution, by Type of Institution

		Age most likely to stop working at postsecondary institution	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.017	
	Sig.	.895	
t-test for Equality of Means	t	.331	.334
	df	254	184.833
	Sig. (2-tailed)	.741	.739
	Mean Difference	.29	.29
	Std. Error Difference	.885	.876
	95% Confidence Interval of the Difference	Lower Upper	-1.450 2.035

Table E.95a

How Likely to Retire and Work Part-time at Institution, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Retire and work P T at institution	Research or Doctoral	122	.65	1.448	.131
	Comprehensive or Liberal Arts	225	.41	1.610	.107

Table E.95b

How Likely to Retire and Work Part-time at Institution, by Type of Institution

		Retire and work P T at institution	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	9.642	
	Sig.	.002	
t-test for Equality of Means	t	1.365	1.408
	df	345	271.543
	Sig. (2-tailed)	.173	.160
	Mean Difference	.24	.24
	Std. Error Difference	.175	.169
	95% Confidence Interval of the Difference	Lower Upper	-.105 .583

Table E.96a

Retired from Another Position, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Have you retired from another position	Research or Doctoral	65	1.98	.124	.015
	Comprehensive or Liberal Arts	80	1.94	.244	.027

Table E.96b

Retired from Another Position, by Type of Institution

		Have you retired from another position		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	8.578		
	Sig.	.004		
t-test for Equality of Means	t	1.417	1.506	
	df	143	122.115	
	Sig. (2-tailed)	.159	.135	
	Mean Difference	.05	.05	
	Std. Error Difference	.033	.031	
	95% Confidence Interval of the Difference	Lower	-.019	-.015
		Upper	.113	.109

Table E.97a

Would You Take Early Retirement, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Would you take early retirement	Research or Doctoral	122	.31	1.730	.157
	Comprehensive or Liberal Arts	225	.21	1.784	.119

Table E.97b

Would You Take Early Retirement, by Type of Institution

		Would you take early retirement		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.060		
	Sig.	.152		
t-test for Equality of Means	t	.517	.522	
	df	345	255.008	
	Sig. (2-tailed)	.606	.602	
	Mean Difference	.10	.10	
	Std. Error Difference	.198	.197	
	95% Confidence Interval of the Difference	Lower	-.288	-.285
		Upper	.493	.490

Table E.98a

Age Likely to Retire from All Paid Employment, by Type of Institution

	Institutional type	N	Mean	Std. Deviation	Std. Error Mean
Age likely retire from all paid employment	Research or Doctoral	88	66.26	6.243	.666
	Comprehensive or Liberal Arts	164	66.21	6.023	.470

Table E.98b

Age Likely to Retire from All Paid Employment, by Type of Institution

		Age likely retire from all paid employment		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.001		
	Sig.	.971		
t-test for Equality of Means	t	.067	.066	
	df	250	172.616	
	Sig. (2-tailed)	.947	.947	
	Mean Difference	.05	.05	
	Std. Error Difference	.806	.815	
	95% Confidence Interval of the Difference	Lower	-1.534	-1.554
		Upper	1.642	1.663

APPENDIX F

Independent t-Test Results, Comparing 1993 Responses to 1999 Responses

Table F.1a

Hours Per Week Paid Activities at Institution, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Hours week paid	1993	202	43.11	13.165	.926
activities at inst	1999	145	47.98	11.467	.952

Table F.1b

Hours Per Week Paid Activities at Institution, by Survey Year

		Hours: week paid activities at inst	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	1.393	
	Sig.	.239	
	t	-3.584	-3.666
	df	345	332.291
	Sig. (2-tailed)	.000	.000
t-test for Equality of Means	Mean Difference	-4.87	-4.87
	Std. Error Difference	1.359	1.328
	95% Confidence Interval of the Difference	Lower -7.543	-7.484
		Upper -2.198	-2.257

Table F.2a

Hours Per Week Unpaid Activities at Institution, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Hours: week unpaid	1993	202	4.67	6.046	.425
activities at inst	1999	145	2.16	5.603	.465

Table F.2b

Hours Per Week Unpaid Activities at Institution, by Survey Year

		Hours/week unpaid activities at inst		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	11.213		
	Sig.	.001		
t-test for Equality of Means	t	3.939	3.989	
	df	345	323.416	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	2.51	2.51	
	Std. Error Difference	.638	.630	
	95% Confidence Interval of the Difference	Lower	1.259	1.274
		Upper	3.770	3.755

Table F.3a

Hours Per Week Paid Activities Not at Institution, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Hours/week paid	1993	202	2.23	5.336	.375
activity not at inst	1999	145	3.22	8.059	.669

Table F.3b

Hours Per Week Paid Activities Not at Institution, by Survey Year

		Hours/week paid activity not at inst		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	6.886		
	Sig.	.009		
t-test for Equality of Means	t	-1.380	-1.294	
	df	345	232.406	
	Sig. (2-tailed)	.168	.197	
	Mean Difference	-.99	-.99	
	Std. Error Difference	.720	.767	
	95% Confidence Interval of the Difference	Lower	-2.408	-2.505
		Upper	.422	.519

Table F.4a

Hours Per Week Unpaid Activities Not at Institution, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Hours/week unpaid	1993	202	1.28	2.668	.188
activity not at inst	1999	145	1.28	2.668	.222

Table F.4b

Hours Per Week Unpaid Activities Not at Institution, by Survey Year

		Hours/week unpaid activity not at inst	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.001	
	Sig.	.975	
	t	.022	.022
	df	345	310.377
t-test for Equality of Means	Sig. (2-tailed)	.983	.983
	Mean Difference	.01	.01
	Std. Error Difference	.290	.290
	95% Confidence Interval of the Difference	Lower Upper	-.565 .578

Table F.5a

Time Actually Spent Teaching, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent teaching	1993	202	65.11	21.256	1.496
	1999	145	67.83	19.756	1.641

Table F.5b

Time Actually Spent Teaching, by Survey Year

		Time actually spent teaching		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.657		
	Sig.	.418		
t-test for Equality of Means	t	-1.213	-1.228	
	df	345	322.977	
	Sig. (2-tailed)	.226	.220	
	Mean Difference	-2.73	-2.73	
	Std. Error Difference	2.247	2.220	
	95% Confidence Interval of the Difference	Lower	-7.145	-7.093
		Upper	1.694	1.642

Table F.6a

Time Actually Spent at Research, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent at research	1993	202	13.25	14.051	.989
	1999	145	12.12	14.912	1.238

Table F.6b

Time Actually Spent at Research, by Survey Year

		Time actually spent at research		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.316		
	Sig.	.574		
t-test for Equality of Means	t	.720	.713	
	df	345	299.018	
	Sig. (2-tailed)	.472	.476	
	Mean Difference	1.13	1.13	
	Std. Error Difference	1.569	1.585	
	95% Confidence Interval of the Difference	Lower	-1.956	-1.988
		Upper	4.217	4.249

Table F.7a

Time Actually Spent on Professional Growth, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent on prof growth	1993	202	5.77	7.887	.555
	1999	145	4.54	6.267	.520

Table F.7b

Time Actually Spent on Professional Growth, by Survey Year

		Time actually spent on professional growth	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	4.434	
	Sig.	.036	
t-test for Equality of Means	t	1.557	1.616
	df	345	341.409
	Sig. (2-tailed)	.120	.107
	Mean Difference	1.23	1.23
	Std. Error Difference	.790	.761
	95% Confidence Interval of the Difference	Lower Upper	-.324 2.783

Table F.8a

Time Actually Spent at Administration, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent at administration	1993	202	8.85	12.205	.859
	1999	145	9.12	11.673	.969

Table F.8b

Time Actually Spent at Administration, by Survey Year

		Time actually spent at administration		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.615		
	Sig.	.433		
t-test for Equality of Means	t	-.209	-.211	
	df	345	318.267	
	Sig. (2-tailed)	.835	.833	
	Mean Difference	-.27	-.27	
	Std. Error Difference	1.305	1.295	
	95% Confidence Interval of the Difference	Lower	-2.839	-2.821
		Upper	2.293	2.275

Table F.9a

Time Actually Spent on Service Activity, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent on service activity	1993	202	4.34	7.586	.534
	1999	145	3.24	5.093	.423

Table F.9b

Time Actually Spent on Service Activity, by Survey Year

		Time actually spent on service activity		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	5.367		
	Sig.	.021		
t-test for Equality of Means	t	1.511	1.608	
	df	345	343.579	
	Sig. (2-tailed)	.132	.109	
	Mean Difference	1.10	1.10	
	Std. Error Difference	.725	.681	
	95% Confidence Interval of the Difference	Lower	-.330	-.244
		Upper	2.521	2.435

Table F.10a

Time Actually Spent on Consulting, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time actually spent on consulting	1993	202	2.69	6.796	.478
	1999	145	3.14	9.975	.828

Table F.10b

Time Actually Spent on Consulting, by Survey Year

		Time actually spent on consulting	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.419	
	Sig.	.518	
	t	-.500	-.470
	df	345	237.083
	Sig. (2-tailed)	.618	.639
t-test for Equality of Means	Mean Difference	-.45	-.45
	Std. Error Difference	.900	.957
	95% Confidence Interval of the Difference	Lower	-2.334
		Upper	1.435

Table F.11a

Time Preferred at Teaching, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time preferred at teaching	1993	202	56.12	20.889	1.470
	1999	145	59.26	20.788	1.726

Table F.11b
Time Preferred at Teaching, by Survey Year

		Time preferred at teaching	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.018	
	Sig.	.893	
	t	-1.380	-1.381
	df	345	311.254
	Sig. (2-tailed)	.168	.168
t-test for Equality of Means	Mean Difference	-3.13	-3.13
	Std. Error Difference	2.269	2.267
	95% Confidence Interval of the Difference	Lower -7.594	-7.592
		Upper 1.331	1.330

Table F.12a
Time Preferred at Research, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time preferred at research	1993	202	22.97	19.309	1.359
	1999	145	19.26	17.106	1.421

Table F.12b
Time Preferred at Research, by Survey Year

		Time preferred at research	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	4.981	
	Sig.	.026	
	t	1.853	1.890
	df	345	330.064
	Sig. (2-tailed)	.065	.060
t-test for Equality of Means	Mean Difference	3.72	3.72
	Std. Error Difference	2.005	1.966
	95% Confidence Interval of the Difference	Lower -.229	-.152
		Upper 7.659	7.582

Table F.13a

Time Preferred on Professional Growth, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time preferred on prof growth	1993	202	8.99	8.547	.601
	1999	145	8.37	7.219	.599

Table F.13b

Time Preferred on Professional Growth, by Survey Year

		Time preferred on professional growth	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	2.106	
	Sig.	.148	
t-test for Equality of Means	t	.708	.727
	df	345	335.929
	Sig. (2-tailed)	.480	.467
	Mean Difference	.62	.62
	Std. Error Difference	.873	.849
	95% Confidence Interval of the Difference	Lower Upper	-1.099 2.335

Table F.14a

Time Preferred at Administration, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time preferred at admin	1993	202	5.29	9.341	.657
	1999	145	5.52	8.535	.709

Table F.14b

Time Preferred at Administration, by Survey Year

		Time preferred at administration		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.380		
	Sig.	.241		
t-test for Equality of Means	t	-.230	-.233	
	df	345	325.617	
	Sig. (2-tailed)	.819	.816	
	Mean Difference	-.23	-.23	
	Std. Error Difference	.981	.967	
	95% Confidence Interval of the Difference	Lower	-2.155	-2.127
		Upper	1.704	1.676

Table F.15a

Time Preferred on Service Activity, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time preferred on service activity	1993	202	3.76	5.499	.387
	1999	145	3.10	4.563	.379

Table F.15b

Time Preferred on Service Activity, by Survey Year

		Time preferred on service activity		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.769		
	Sig.	.097		
t-test for Equality of Means	t	1.184	1.220	
	df	345	337.745	
	Sig. (2-tailed)	.237	.223	
	Mean Difference	.66	.66	
	Std. Error Difference	.558	.542	
	95% Confidence Interval of the Difference	Lower	-.437	-.404
		Upper	1.759	1.726

Table F.16a

Time Preferred on Consulting, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Time preferred on consulting	1993	202	2.87	6.336	.446
	1999	145	4.52	11.255	.935

Table F.16b

Time Preferred on Consulting, by Survey Year

		Time preferred on consulting	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	5.491	
	Sig.	.020	
	t	-1.737	-1.594
	df	345	209.217
	Sig. (2-tailed)	.083	.112
t-test for Equality of Means	Mean Difference	-1.65	-1.65
	Std. Error Difference	.951	1.036
	95% Confidence Interval of the Difference	Lower	-3.520
		Upper	.219

Table F.17a

Number of Undergraduate Committees Served On, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
No. undergrad cmttees served on	1993	202	.41	1.729	.122
	1999	145	.54	1.394	.116

Table F.17b

Number of Undergraduate Committees Served On, by Survey Year

		No. undergrad cmtees served on		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.523		
	Sig.	.470		
t-test for Equality of Means	t	-.770	-.797	
	df	345	340.302	
	Sig. (2-tailed)	.442	.426	
	Mean Difference	-.13	-.13	
	Std. Error Difference	.174	.168	
	95% Confidence Interval of the Difference	Lower	-.476	-.464
		Upper	.208	.196

Table F.18a

Number of Graduate Committees Served On, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
No. grad cmtees served on	1993	202	2.73	8.837	.622
	1999	145	1.79	3.412	.283

Table F.18b

Number of Graduate Committees Served On, by Survey Year

		No. grad cmtees served on		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	7.091		
	Sig.	.008		
t-test for Equality of Means	t	1.219	1.378	
	df	345	276.502	
	Sig. (2-tailed)	.224	.169	
	Mean Difference	.94	.94	
	Std. Error Difference	.772	.683	
	95% Confidence Interval of the Difference	Lower	-.578	-.404
		Upper	2.461	2.287

Table F.19a

Number of Undergraduate Committees Chaired, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
No. undergrad cmtees chaired	1993	202	.22	.780	.055
	1999	145	.21	.999	.083

Table F.19b

Number of Undergraduate Committees Chaired, by Survey Year

		No. undergrad cmtees chaired		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.055		
	Sig.	.814		
t-test for Equality of Means	t	.114	.110	
	df	345	261.747	
	Sig. (2-tailed)	.909	.913	
	Mean Difference	.01	.01	
	Std. Error Difference	.096	.100	
	95% Confidence Interval of the Difference	Lower	-.177	-.185
		Upper	.199	.207

Table F.20a

Number of Graduate Committees Chaired, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
No. grad cmtees chaired	1993	202	1.06	3.798	.267
	1999	145	.88	2.692	.224

Table F.20b

Number of Graduate Committees Chaired, by Survey Year

		No. grad cmtees chaired		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.138		
	Sig.	.145		
t-test for Equality of Means	t	.499	.527	
	df	345	344.955	
	Sig. (2-tailed)	.618	.599	
	Mean Difference	.18	.18	
	Std. Error Difference	.368	.348	
	95% Confidence Interval of the Difference	Lower	-.540	-.502
		Upper	.907	.869

Table F.21a

Total Classes Taught, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Total classes taught	1993	202	3.47	1.932	.136
	1999	145	3.39	2.473	.205

Table F.21b

Total Classes Taught, by Survey Year

		Total classes taught		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.491		
	Sig.	.484		
t-test for Equality of Means	t	.305	.293	
	df	345	261.821	
	Sig. (2-tailed)	.760	.769	
	Mean Difference	.07	.07	
	Std. Error Difference	.237	.246	
	95% Confidence Interval of the Difference	Lower	-.393	-.413
		Upper	.538	.557

Table F.22a

Total Office Hours Per Week, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Total office hours/week	1993	202	6.95	6.072	.427
	1999	145	6.11	5.147	.427

Table F.22b

Total Office Hours Per Week, by Survey Year

		Total office hours/week		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.442		
	Sig.	.119		
t-test for Equality of Means	t	1.353	1.390	
	df	345	335.527	
	Sig. (2-tailed)	.177	.165	
	Mean Difference	.84	.84	
	Std. Error Difference	.621	.604	
	95% Confidence Interval of the Difference	Lower	-.381	-.349
		Upper	2.061	2.029

Table F.23a

Any Creative Work / Writing / Research, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Any creative work writing research	1993	202	1.34	.474	.033
	1999	145	1.41	.494	.041

Table F.23b

Any Creative Work / Writing / Research, by Survey Year

		Any creative work/writing/research		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	7.370		
	Sig.	.007		
t-test for Equality of Means	t	-1.470	-1.459	
	df	345	302.360	
	Sig. (2-tailed)	.143	.146	
	Mean Difference	-.08	-.08	
	Std. Error Difference	.053	.053	
	95% Confidence Interval of the Difference	Lower	-.180	-.181
		Upper	.026	.027

Table F.24a

Any Funded Research, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Any funded research	1993	202	3.17	2.054	.145
	1999	145	1.71	.455	.038

Table F.24b

Any Funded Research, by Survey Year

		Any funded research		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	545.297		
	Sig.	.000		
t-test for Equality of Means	t	8.396	9.759	
	df	345	227.945	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	1.46	1.46	
	Std. Error Difference	.174	.149	
	95% Confidence Interval of the Difference	Lower	1.116	1.164
		Upper	1.800	1.752

Table F.25a

Principal Investigator/Co-Principal Investigator on Grants, Contracts, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
PI/Co-PI on any grants or contracts	1993	202	5.14	1.851	.130
	1999	145	1.79	.411	.034

Table F.25b

Principal Investigator/Co-Principal Investigator on Grants, Contracts, by Survey Year

		PI/Co-PI on any grants or contracts	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	2.717	
	Sig.	.000	
t-test for Equality of Means	t	21.453	24.932
	df	345	228.103
	Sig. (2-tailed)	.000	.000
	Mean Difference	3.36	3.36
	Std. Error Difference	.156	.135
	95% Confidence Interval of the Difference	Lower Upper	3.050 3.665

Table F.26a

Funds for Tuition Remission, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Internal tuition remission funds	1993	202	2.41	.657	.046
	1999	145	2.66	1.030	.086

Table F.26b

Funds for Tuition Remission, by Survey Year

		Funds for tuition remission		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	4.702		
	Sig.	.031		
t-test for Equality of Means	t	1.087	1.061	
	df	345	281.775	
	Sig. (2-tailed)	.278	.290	
	Mean Difference	.04	.04	
	Std. Error Difference	.034	.035	
	95% Confidence Interval of the Difference	Lower	-.030	-.032
	Upper	.104	.106	

Table F.27a

Funds for Professional Association Memberships, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Internal prof.	1993	202	2.40	.859	.060
assoc. funds	1999	145	2.52	1.125	.093

Table F.27b

Funds for Professional Association Memberships, by Survey Year

		Funds for professional associations		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.978		
	Sig.	.085		
t-test for Equality of Means	t	.875	.868	
	df	345	300.726	
	Sig. (2-tailed)	.382	.386	
	Mean Difference	.04	.04	
	Std. Error Difference	.048	.049	
	95% Confidence Interval of the Difference	Lower	-.053	-.053
	Upper	.137	.138	

Table F.28a

Funds for Professional Travel, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Internal prof.	1993	202	1.76	.830	.058
travel funds	1999	145	1.57	.848	.070

Table F.28b

Funds for Professional Travel, by Survey Year

		Funds for professional travel	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	15.368	
	Sig.	.000	
	t	2.687	2.703
	df	345	316.863
	Sig. (2-tailed)	.008	.007
t-test for Equality of Means	Mean Difference	.14	.14
	Std. Error Difference	.054	.053
	95% Confidence Interval of the Difference	Lower Upper	.039 .249

Table F.29a

Funds for Training to Improve Research or Teaching, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Internal training to improve res. teaching	1993	202	2.45	.740	.052
	1999	145	2.30	1.050	.087

Table F.29b

Funds for Training to Improve Research or Teaching, by Survey Year

		Funds for training to improve research, teaching		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	30.650		
	Sig.	.000		
t-test for Equality of Means	t	2.796	2.697	
	df	345	266.706	
	Sig. (2-tailed)	.005	.007	
	Mean Difference	.12	.12	
	Std. Error Difference	.043	.045	
	95% Confidence Interval of the Difference	Lower	.036	.033
		Upper	.205	.208

Table F.30a

Funds for Sabbatical Leave, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Internal sabbatical leave	1993	202	2.41	.634	.045
	1999	145	2.70	.765	.064

Table F.30b

Funds for Sabbatical Leave, by Survey Year

		Funds for sabbatical leave		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	8.440		
	Sig.	.004		
t-test for Equality of Means	t	-1.426	-1.497	
	df	345	344.716	
	Sig. (2-tailed)	.155	.135	
	Mean Difference	-.04	-.04	
	Std. Error Difference	.027	.025	
	95% Confidence Interval of the Difference	Lower	-.090	-.088
		Upper	.014	.012

Table F.31a

Satisfaction with Authority to Decide Course Content, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w authority to decide course content	1993	202	3.38	1.716	.121
	1999	145	3.74	.562	.047

Table F.31b

Satisfaction with Authority to Decide Course Content, by Survey Year

		Satis w authority to decide course content	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	16.191	
	Sig.	.000	
t-test for Equality of Means	t	-2.458	-2.809
	df	345	257.637
	Sig. (2-tailed)	.014	.005
	Mean Difference	-.36	-.36
	Std. Error Difference	.148	.129
	95% Confidence Interval of the Difference	Lower Upper	-.655 -.073

Table F.32a

Satisfaction with Authority to Decide Courses Taught, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w authority to decide courses taught	1993	202	2.80	1.870	.132
	1999	145	3.23	.791	.066

Table F.32b

Satisfaction with Authority to Decide Courses Taught, by Survey Year

		Satis w/authority to decide courses taught		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	10.463		
	Sig.	.001		
t-test for Equality of Means	t	-2.651	-2.975	
	df	345	288.623	
	Sig. (2-tailed)	.008	.003	
	Mean Difference	-.44	-.44	
	Std. Error Difference	.165	.147	
	95% Confidence Interval of the Difference	Lower	-.762	-.727
		Upper	-.113	-.148

Table F.33a

Satisfaction with Authority to Make Other Job Decisions, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w/authority make other job decision	1993	202	2.44	2.051	.144
	1999	145	2.95	.945	.078

Table F.33b

Satisfaction with Authority to Make Other Job Decisions, by Survey Year

		Satis w/authority make other job decision		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	13.786		
	Sig.	.000		
t-test for Equality of Means	t	-2.794	-3.111	
	df	345	300.767	
	Sig. (2-tailed)	.005	.002	
	Mean Difference	-.51	-.51	
	Std. Error Difference	.183	.164	
	95% Confidence Interval of the Difference	Lower	-.871	-.834
		Upper	-.151	-.188

Table F.34a

Satisfaction with Time Available to Advise Students, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w/time available to advise students	1993	202	2.77	1.837	.129
	1999	145	3.08	.826	.069

Table F.34b

Satisfaction with Time Available to Advise Students, by Survey Year

		Satis w/time available to advise students		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	8.174		
	Sig.	.005		
t-test for Equality of Means	t	-1.890	-2.109	
	df	345	297.220	
	Sig. (2-tailed)	.060	.036	
	Mean Difference	-.31	-.31	
	Std. Error Difference	.163	.146	
	95% Confidence Interval of the Difference	Lower	-.630	-.596
		Upper	.013	-.021

Table F.35a

Satisfaction with Quality of Undergraduate Students, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w. quality of undergrad students	1993	202	2.27	1.858	.131
	1999	145	2.51	1.281	.106

Table F.35b

Satisfaction with Quality of Undergraduate Students, by Survey Year

		Satis w/quality of undergrad students		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.239		
	Sig.	.135		
t-test for Equality of Means	t	-1.360	-1.442	
	df	345	344.491	
	Sig. (2-tailed)	.175	.150	
	Mean Difference	-.24	-.24	
	Std. Error Difference	.179	.169	
	95% Confidence Interval of the Difference	Lower	-.594	-.574
		Upper	.108	.088

Table F.36a

Satisfaction with Quality of Graduate Students, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w/quality of graduate students	1993	202	.36	3.765	.265
	1999	145	.08	3.768	.313

Table F.36b

Satisfaction with Quality of Graduate Students, by Survey Year

		Satis w/quality of graduate students		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.124		
	Sig.	.725		
t-test for Equality of Means	t	.680	.680	
	df	345	310.172	
	Sig. (2-tailed)	.497	.497	
	Mean Difference	.28	.28	
	Std. Error Difference	.410	.410	
	95% Confidence Interval of the Difference	Lower	-.528	-.528
		Upper	1.085	1.085

Table F.37a

Satisfaction with Workload, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w workload	1993	202	2.83	.936	.066
	1999	145	2.56	.920	.076

Table F.37b

Satisfaction with Workload, by Survey Year

		Satis w workload	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.519	
	Sig.	.472	
t-test for Equality of Means	t	2.699	2.707
	df	345	313.682
	Sig. (2-tailed)	.007	.007
	Mean Difference	.27	.27
	Std. Error Difference	.101	.101
	95% Confidence Interval of the Difference	Lower Upper	.074 .472

Table F.38a

Satisfaction with Advancement Opportunities, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w job security	1993	202	3.04	1.009	.071
	1999	145	3.27	.892	.074

Table F.38b

Satisfaction with Advancement Opportunities, by Survey Year

		Satis w/advancement opportunity		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	4.668		
	Sig.	.031		
t-test for Equality of Means	t	-1.037	-1.053	
	df	345	326.389	
	Sig. (2-tailed)	.301	.293	
	Mean Difference	-.11	-.11	
	Std. Error Difference	.106	.104	
	95% Confidence Interval of the Difference	Lower	-.319	-.315
		Upper	.099	.095

Table F.39a

Satisfaction with Time to Keep Current in Field, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w/ time to keep current in field	1993	202	2.35	.903	.064
	1999	145	2.17	.913	.076

Table F.39b

Satisfaction with Time to Keep Current in Field, by Survey Year

		Satis w/time to keep current in field		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.045		
	Sig.	.832		
t-test for Equality of Means	t	1.834	1.830	
	df	345	308.236	
	Sig. (2-tailed)	.068	.068	
	Mean Difference	.18	.18	
	Std. Error Difference	.099	.099	
	95% Confidence Interval of the Difference	Lower	-.013	-.014
		Upper	.375	.376

Table F.40a

Satisfaction with Freedom to Do Consulting, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w/ freedom to do consulting	1993	202	3.04	.908	.064
	1999	145	3.10	.814	.068

Table F.40b

Satisfaction with Freedom to Do Consulting, by Survey Year

		Satis w/freedom to do consulting		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.780		
	Sig.	.378		
t-test for Equality of Means	t	-.674	-.686	
	df	345	328.374	
	Sig. (2-tailed)	.501	.493	
	Mean Difference	-.06	-.06	
	Std. Error Difference	.095	.093	
	95% Confidence Interval of the Difference	Lower	-.250	-.247
		Upper	.122	.119

Table F.41a

Satisfaction with Job Overall, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w/job overall	1993	202	3.01	.766	.054
	1999	145	2.83	.767	.064

Table F.41b
Satisfaction with Job Overall, by Survey Year

		Satis w/job overall		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.332		
	Sig.	.249		
t-test for Equality of Means	t	2.185	2.185	
	df	345	310.181	
	Sig. (2-tailed)	.030	.030	
	Mean Difference	.18	.18	
	Std. Error Difference	.083	.083	
	95% Confidence Interval of the Difference	Lower	.018	.018
		Upper	.346	.346

Table F.42a
How Important Advancement Opportunities, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: advancement	1993	202	2.47	.655	.046
	1999	145	2.40	.701	.058

Table F.42b
How Important Advancement Opportunities, by Survey Year

		How important: advancement opportunity		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.321		
	Sig.	.251		
t-test for Equality of Means	t	.890	.880	
	df	345	297.347	
	Sig. (2-tailed)	.374	.380	
	Mean Difference	.07	.07	
	Std. Error Difference	.073	.074	
	95% Confidence Interval of the Difference	Lower	-.079	-.081
		Upper	.210	.211

Table F.43a

How Important No Pressure to Publish, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: no pressure to publish	1993	202	2.00	.773	.054
	1999	145	1.97	.754	.063

Table F.43b

How Important No Pressure to Publish, by Survey Year

		How important: no pressure to publish	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.106	
	Sig.	.745	
t-test for Equality of Means	t	.331	.333
	df	345	314.753
	Sig. (2-tailed)	.741	.740
	Mean Difference	.03	.03
	Std. Error Difference	.083	.083
	95% Confidence Interval of the Difference	Lower Upper	-.136 .191

Table F.44a

How Important Teaching Opportunities, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: teaching opp	1993	202	2.08	.769	.054
	1999	145	2.00	.755	.063

Table F.44b

How Important Teaching Opportunities, by Survey Year

		How important: teaching opportunity		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.124		
	Sig.	.290		
t-test for Equality of Means	t	.954	.957	
	df	345	313.689	
	Sig. (2-tailed)	.341	.339	
	Mean Difference	.08	.08	
	Std. Error Difference	.083	.083	
	95% Confidence Interval of the Difference	Lower	-.084	-.084
		Upper	.243	.242

Table F.45a

How Important Research Opportunities, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: research opp	1993	202	2.06	.796	.056
	1999	145	2.02	.803	.067

Table F.45b

How Important Research Opportunities, by Survey Year

		How important: research opportunity		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.005		
	Sig.	.944		
t-test for Equality of Means	t	.445	.445	
	df	345	308.604	
	Sig. (2-tailed)	.656	.657	
	Mean Difference	.04	.04	
	Std. Error Difference	.087	.087	
	95% Confidence Interval of the Difference	Lower	-.132	-.133
		Upper	.210	.210

Table F.46a

Academic Rank, Title, or Job, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Academic rank, title or job	1993	202	2.65	1.242	.087
	1999	145	2.52	1.173	.097

Table F.46b

Academic Rank, Title, or Job, by Survey Year

		Academic rank, title or job	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.129	
	Sig.	.720	
t-test for Equality of Means	t	.942	.950
	df	345	320.364
	Sig. (2-tailed)	.347	.343
	Mean Difference	.12	.12
	Std. Error Difference	.132	.131
	95% Confidence Interval of the Difference	Lower Upper	-.135 .384

Table F.47a

Number of Years in Current Job, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Years in current job	1993	202	8.58	7.476	.526
	1999	145	11.30	9.281	.771

Table F.47b
Number of Years in Current Job, by Survey Year

		Years in current job		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	14.472		
	Sig.	.000		
t-test for Equality of Means	t	-3.018	-2.914	
	df	345	267.748	
	Sig. (2-tailed)	.003	.004	
	Mean Difference	-2.72	-2.72	
	Std. Error Difference	.901	.933	
	95% Confidence Interval of the Difference	Lower	-4.491	-4.557
		Upper	-.947	-.882

Table F.48a
Employed Only at Current Institution, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Employed only at current institution	1993	202	1.17	.375	.026
	1999	145	1.50	.502	.042

Table F.48b
Employed Only at Current Institution, by Survey Year

		Employed only at current institution		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	113.257		
	Sig.	.000		
t-test for Equality of Means	t	-7.120	-6.795	
	df	345	253.486	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	-.34	-.34	
	Std. Error Difference	.047	.049	
	95% Confidence Interval of the Difference	Lower	-.428	-.432
		Upper	-.243	-.238

Table F.49a

Other Employment--Number of Positions, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Other employment, number of positions	1993	34	1.62	1.129	.194
	1999	145	.50	.929	.077

Table F.49b

Other Employment--Number of Positions, by Survey Year

		Other employment, number of positions		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.668		
	Sig.	.198		
t-test for Equality of Means	t	6.033	5.348	
	df	177	44.062	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	1.11	1.11	
	Std. Error Difference	.185	.208	
	95% Confidence Interval of the Difference	Lower	.750	.694
		Upper	1.479	1.534

Table F.50a

Rating of Research Equipment and Instruments, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Rating of research equip/instruments	1993	202	3.10	1.306	.092
	1999	145	2.79	1.270	.105

Table F.50b

Rating of Research Equipment and Instruments, by Survey Year

		Rating of research equipment, instruments		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.171		
	Sig.	.680		
t-test for Equality of Means	t	2.261	2.271	
	df	345	315.347	
	Sig. (2-tailed)	.024	.024	
	Mean Difference	.32	.32	
	Std. Error Difference	.141	.140	
	95% Confidence Interval of the Difference	Lower	.041	.042
		Upper	.594	.593

Table F.51a

Rating of Laboratory Space and Supplies, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Rating of laboratory space and supplies	1993	202	3.18	1.261	.089
	1999	145	2.74	1.332	.111

Table F.51b

Rating of Laboratory Space and Supplies, by Survey Year

		Rating of laboratory space and supplies		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.640		
	Sig.	.201		
t-test for Equality of Means	t	3.084	3.056	
	df	345	299.907	
	Sig. (2-tailed)	.002	.002	
	Mean Difference	.43	.43	
	Std. Error Difference	.141	.142	
	95% Confidence Interval of the Difference	Lower	.157	.154
		Upper	.710	.712

Table F.52a

Rating of Availability of Research Assistants, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Rating of avail of research assistants	1993	202	3.14	1.609	.113
	1999	145	2.81	1.721	.143

Table F.52b

Rating of Availability of Research Assistants, by Survey Year

		Rating of availability of research assistants		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	3.143		
	Sig.	.077		
t-test for Equality of Means	t	1.840	1.819	
	df	345	297.421	
	Sig. (2-tailed)	.067	.070	
	Mean Difference	.33	.33	
	Std. Error Difference	.180	.182	
	95% Confidence Interval of the Difference	Lower	-.023	-.027
		Upper	.686	.691

Table F.53a

Rating of Computers and Local Networks, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Rating of computers and local networks	1993	202	3.21	.956	.067
	1999	145	3.05	.877	.073

Table F.53b

Rating of Computers and Local Networks, by Survey Year

		Rating of computers and local networks		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	3.035		
	Sig.	.082		
t-test for Equality of Means	t	1.637	1.660	
	df	345	325.139	
	Sig. (2-tailed)	.103	.098	
	Mean Difference	.16	.16	
	Std. Error Difference	.101	.099	
	95% Confidence Interval of the Difference	Lower	-.033	-.030
		Upper	.362	.360

Table F.54a

Rating of Centralized Computer Facilities, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Rating of central computer facilities	1993	202	3.16	1.145	.081
	1999	145	3.02	1.233	.102

Table F.54b

Rating of Centralized Computer Facilities, by Survey Year

		Rating of centralized computer facilities		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.531		
	Sig.	.467		
t-test for Equality of Means	t	1.108	1.095	
	df	345	296.182	
	Sig. (2-tailed)	.268	.274	
	Mean Difference	.14	.14	
	Std. Error Difference	.129	.130	
	95% Confidence Interval of the Difference	Lower	-.111	-.114
		Upper	.396	.399

Table F.55a

Rating of Internet Connections, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Rating of Internet connections	1993	202	3.15	1.181	.083
	1999	145	3.17	.885	.073

Table F.55b

Rating of Internet Connections, by Survey Year

		Rating of Internet connections	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	9.866	
	Sig.	.002	
t-test for Equality of Means	t	-.163	-.171
	df	345	344.350
	Sig. (2-tailed)	.871	.864
	Mean Difference	-.02	-.02
	Std. Error Difference	.116	.111
	95% Confidence Interval of the Difference	Lower Upper	-.247 .210

Table F.56a

Rating of Audio-visual Equipment, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Rating of audio-visual equipment	1993	202	2.95	.994	.070
	1999	145	2.70	.951	.079

Table F.56b
Rating of Audio-visual Equipment, by Survey Year

		Rating of audio-visual equipment		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.642		
	Sig.	.201		
t-test for Equality of Means	t	2.279	2.295	
	df	345	318.117	
	Sig. (2-tailed)	.023	.022	
	Mean Difference	.24	.24	
	Std. Error Difference	.106	.105	
	95% Confidence Interval of the Difference	Lower	.033	.035
		Upper	.451	.450

Table F.57a
Rating of Classroom Space, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Rating of classroom space	1993	202	3.01	.804	.057
	1999	145	2.55	.889	.074

Table F.57b
Rating of Classroom Space, by Survey Year

		Rating of classroom space		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	18.565		
	Sig.	.000		
t-test for Equality of Means	t	5.007	4.925	
	df	345	290.881	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	.46	.46	
	Std. Error Difference	.092	.093	
	95% Confidence Interval of the Difference	Lower	.278	.275
		Upper	.638	.641

Table F.58a
Rating of Office Space, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Rating of office space	1993	202	3.00	.906	.064
	1999	145	2.75	.990	.082

Table F.58b
Rating of Office Space, by Survey Year

		Rating of office space	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	10.809	
	Sig.	.001	
t-test for Equality of Means	t	2.374	2.339
	df	345	293.308
	Sig. (2-tailed)	.018	.020
	Mean Difference	.24	.24
	Std. Error Difference	.103	.104
	95% Confidence Interval of the Difference	Lower Upper	.042 .445

Table F.59a
Rating of Secretarial Support, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Rating of secretarial support	1993	202	2.79	1.063	.075
	1999	145	2.47	1.106	.092

Table F.59b

Rating of Secretarial Support, by Survey Year

		Rating of secretarial support		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.774		
	Sig.	.097		
t-test for Equality of Means	t	2.745	2.728	
	df	345	302.959	
	Sig. (2-tailed)	.006	.007	
	Mean Difference	.32	.32	
	Std. Error Difference	.118	.118	
	95% Confidence Interval of the Difference	Lower	.092	.090
		Upper	.555	.556

Table F.60a

Rating of Library Holdings, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Rating of library holdings	1993	202	2.63	.990	.070
	1999	145	2.51	1.087	.090

Table F.60b

Rating of Library Holdings, by Survey Year

		Rating of library holdings		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	3.161		
	Sig.	.076		
t-test for Equality of Means	t	1.054	1.038	
	df	345	292.320	
	Sig. (2-tailed)	.293	.300	
	Mean Difference	.12	.12	
	Std. Error Difference	.112	.114	
	95% Confidence Interval of the Difference	Lower	-.103	-.106
		Upper	.339	.343

Table F.61a

Satisfaction with Job Security: by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w:job security	1993	202	3.04	1.009	.071
	1999	145	3.27	.892	.074

Table F.61b

Satisfaction with Job Security: by Survey Year

		Satis w:job security	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.100	
	Sig.	.752	
t-test for Equality of Means	t	-2.144	-2.188
	df	345	330.375
	Sig. (2-tailed)	.033	.029
	Mean Difference	-.22	-.22
	Std. Error Difference	.105	.103
	95% Confidence Interval of the Difference	Lower Upper	-.430 -.019

Table F.62a

Satisfaction with Salary: by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w:salary	1993	202	2.35	.914	.064
	1999	145	2.23	.948	.079

Table F.62b
Satisfaction with Salary, by Survey Year

		Satis w/salary		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.090		
	Sig.	.764		
t-test for Equality of Means	t	1.226	1.218	
	df	345	303.499	
	Sig. (2-tailed)	.221	.224	
	Mean Difference	.12	.12	
	Std. Error Difference	.101	.102	
	95% Confidence Interval of the Difference	Lower	-.075	-.076
		Upper	.323	.324

Table F.63a
Satisfaction with Benefits, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w/benefits	1993	202	2.83	.906	.064
	1999	145	2.79	.851	.071

Table F.63b
Satisfaction with Benefits, by Survey Year

		Satis w/benefits		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.651		
	Sig.	.420		
t-test for Equality of Means	t	.421	.426	
	df	345	321.184	
	Sig. (2-tailed)	.674	.671	
	Mean Difference	.04	.04	
	Std. Error Difference	.096	.095	
	95% Confidence Interval of the Difference	Lower	-.149	-.147
		Upper	.230	.228

Table F.64a

Satisfaction with Job Opportunities for Spouse, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Satis w spouse	1993	202	2.77	1.013	.071
emp opportunity	1999	145	1.21	3.422	.284

Table F.64b

Satisfaction with Job Opportunities for Spouse, by Survey Year

		Satis w spouse job opportunity	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	175.123	
	Sig.	.000	
	t	6.094	5.302
	df	345	162.208
	Sig. (2-tailed)	.000	.000
t-test for Equality of Means	Mean Difference	1.55	1.55
	Std. Error Difference	.255	.293
	95% Confidence Interval of the Difference	Lower 2.055	.975 2.132
		Upper	

Table F.65a

How Important Salary Level, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: salary	1993	202	2.53	.557	.039
	1999	145	2.50	.602	.050

Table F.65b

How Important Salary Level, by Survey Year

		How important: salary		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.904		
	Sig.	.169		
t-test for Equality of Means	t	.608	.600	
	df	345	295.152	
	Sig. (2-tailed)	.544	.549	
	Mean Difference	.04	.04	
	Std. Error Difference	.063	.064	
	95% Confidence Interval of the Difference	Lower	-.085	-.087
		Upper	.161	.163

Table F.66a

How Important Tenure, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: tenure	1993	202	2.40	.761	.054
	1999	145	2.26	.825	.069

Table F.66b

How Important Tenure, by Survey Year

		How important: tenure		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.671		
	Sig.	.103		
t-test for Equality of Means	t	1.618	1.597	
	df	345	294.894	
	Sig. (2-tailed)	.106	.111	
	Mean Difference	.14	.14	
	Std. Error Difference	.086	.087	
	95% Confidence Interval of the Difference	Lower	-.030	-.032
		Upper	.308	.310

Table F.67a

How Important Job Security, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: job security	1993	202	2.60	.575	.040
	1999	145	2.50	.657	.055

Table F.67b

How Important Job Security, by Survey Year

		How important: job security		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	6.546		
	Sig.	.011		
	t	1.541	1.507	
	df	345	284.257	
t-test for Equality of Means	Sig. (2-tailed)	.124	.133	
	Mean Difference	.10	.10	
	Std. Error Difference	.066	.068	
	95% Confidence Interval of the Difference	Lower	-.028	-.031
		Upper	.233	.236

Table F.68a

How Important Benefits, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: benefits	1993	202	2.56	.563	.040
	1999	145	2.59	.596	.050

Table F.68b

How Important Benefits, by Survey Year

		How important: benefits		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.083		
	Sig.	.773		
t-test for Equality of Means	t	-.427	-.423	
	df	345	299.593	
	Sig. (2-tailed)	.670	.673	
	Mean Difference	-.03	-.03	
	Std. Error Difference	.063	.063	
	95% Confidence Interval of the Difference	Lower	-.150	-.152
		Upper	.097	.098

Table F.69a

How Important Research Facilities, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: research facilities	1993	202	2.38	.697	.049
	1999	145	2.29	.716	.059

Table F.69b

How Important Research Facilities, by Survey Year

		How important: research facilities		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.004		
	Sig.	.952		
t-test for Equality of Means	t	1.193	1.188	
	df	345	305.309	
	Sig. (2-tailed)	.234	.236	
	Mean Difference	.09	.09	
	Std. Error Difference	.077	.077	
	95% Confidence Interval of the Difference	Lower	-.059	-.060
		Upper	.242	.243

Table F.70a

How Important Instructional Facilities, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: instructional facilities	1993	202	2.58	.578	.041
	1999	145	2.59	.572	.048

Table F.70b

How Important Instructional Facilities, by Survey Year

		How important: instructional facilities	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.046	
	Sig.	.830	
t-test for Equality of Means	t	-.112	-.112
	df	345	312.267
	Sig. (2-tailed)	.911	.911
	Mean Difference	-.01	-.01
	Std. Error Difference	.063	.063
	95% Confidence Interval of the Difference	Lower Upper	-.130 .116

Table F.71a

How Important Spouse Employment Opportunities, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: job for spouse	1993	202	2.20	.775	.055
	1999	145	.94	2.870	.238

Table F.71b

How Important Spouse Employment Opportunities, by Survey Year

		How important: job for spouse		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	110.905		
	Sig.	.000		
t-test for Equality of Means	t	5.971	5.173	
	df	345	159.147	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	1.27	1.27	
	Std. Error Difference	.212	.245	
	95% Confidence Interval of the Difference	Lower	.848	.782
		Upper	1.682	1.748

Table F.72a

How Important Geographic Location, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: geographic location	1993	202	2.47	.624	.044
	1999	145	2.52	.590	.049

Table F.72b

How Important Geographic Location, by Survey Year

		How important: geographic location		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.090		
	Sig.	.297		
t-test for Equality of Means	t	-.885	-.893	
	df	345	320.121	
	Sig. (2-tailed)	.377	.372	
	Mean Difference	-.06	-.06	
	Std. Error Difference	.066	.066	
	95% Confidence Interval of the Difference	Lower	-.189	-.188
		Upper	.072	.071

Table F.73a

How Important Good Schools for Children, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How important: schools for kids	1993	202	2.15	.893	.063
	1999	145	-.18	3.386	.281

Table F.73b

How Important Good Schools for Children, by Survey Year

		How important: good schools for kids		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	457.251		
	Sig.	.000		
t-test for Equality of Means	t	9.353	8.096	
	df	345	158.448	
	Sig. (2-tailed)	.000	.000	
	Mean Difference	2.33	2.33	
	Std. Error Difference	.249	.288	
	95% Confidence Interval of the Difference	Lower	1.842	1.764
		Upper	2.823	2.902

Table F.74a

Total Income from Institution, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Income from institution	1993	202	4.07	1.639	.115
	1999	145	5.43	2.114	.176

Table F.74b

Total Income from Institution, by Survey Year

		Income from institution	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	15.858	
	Sig.	.000	
t-test for Equality of Means	t	-6.713	-6.443
	df	345	260.346
	Sig. (2-tailed)	.000	.000
	Mean Difference	-1.35	-1.35
	Std. Error Difference	.202	.210
	95% Confidence Interval of the Difference	Lower Upper	-1.750 -.957

Table F.75a

Total Personal Income--All Sources, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Total income all sources	1993	202	4.42	1.846	.130
	1999	145	6.19	2.168	.180

Table F.75b

Total Personal Income--All Sources, by Survey Year

		Total income all sources	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	8.858	
	Sig.	.003	
t-test for Equality of Means	t	-8.196	-7.984
	df	345	278.866
	Sig. (2-tailed)	.000	.000
	Mean Difference	-1.77	-1.77
	Std. Error Difference	.216	.222
	95% Confidence Interval of the Difference	Lower Upper	-2.198 -1.347

Table F.76a

Total Household Income, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Total household income	1993	202	6.04	2.359	.166
	1999	145	8.19	2.436	.202

Table F.76b

Total Household Income, by Survey Year

		Total household income	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.811	
	Sig.	.368	
t-test for Equality of Means	t	-8.254	-8.210
	df	345	304.322
	Sig. (2-tailed)	.000	.000
	Mean Difference	-2.15	-2.15
	Std. Error Difference	.260	.262
	95% Confidence Interval of the Difference	Lower Upper	-2.661 -1.637

Table F.77a

Gender, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Gender	1993	202	1.25	.436	.031
	1999	145	1.22	.416	.035

Table F.77b
Gender, by Survey Year

		Gender		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.907		
	Sig.	.168		
t-test for Equality of Means	t	.683	.688	
	df	345	318.423	
	Sig. (2-tailed)	.495	.492	
	Mean Difference	.03	.03	
	Std. Error Difference	.047	.046	
	95% Confidence Interval of the Difference	Lower	-.060	-.059
		Upper	.123	.123

Table F.78a
Age, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Age	1993	202	2.71	.862	.061
	1999	145	3.08	1.140	.095

Table F.78b
Age, by Survey Year

		Age		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	6.414		
	Sig.	.012		
t-test for Equality of Means	t	-3.442	-3.291	
	df	345	255.674	
	Sig. (2-tailed)	.001	.001	
	Mean Difference	-.37	-.37	
	Std. Error Difference	.107	.112	
	95% Confidence Interval of the Difference	Lower	-.581	-.591
		Upper	-.159	-.149

Table F.79a
Country of Birth, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Country of birth	1993	202	1.29	.456	.032
	1999	145	1.25	.434	.036

Table F.79b
Country of Birth, by Survey Year

		Country of birth	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	3.353	
	Sig.	.068	
t-test for Equality of Means	t	.901	.908
	df	345	319.228
	Sig. (2-tailed)	.368	.364
	Mean Difference	.04	.04
	Std. Error Difference	.049	.048
	95% Confidence Interval of the Difference	Lower Upper	-.052 .139

Table F.80a
Citizenship Status, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Citizenship status	1993	202	1.49	.871	.061
	1999	145	1.44	.824	.068

Table F.80b
Citizenship Status, by Survey Year

		Citizenship status		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	1.413		
	Sig.	.235		
t-test for Equality of Means	t	.472	.477	
	df	345	320.101	
	Sig. (2-tailed)	.637	.634	
	Mean Difference	.04	.04	
	Std. Error Difference	.093	.092	
	95% Confidence Interval of the Difference	Lower	-.139	-.137
		Upper	.226	.224

Table F.81a

How Likely to Accept Part-time Postsecondary Job, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How likely accept	1993	202	1.18	.480	.034
P T pstsec job in 3 yr	1999	145	1.17	.476	.040

Table F.81b

How Likely to Accept Part-time Postsecondary Job, by Survey Year

		How likely accept P/T pstsec job in 3 yr		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.126		
	Sig.	.723		
t-test for Equality of Means	t	.207	.207	
	df	345	311.545	
	Sig. (2-tailed)	.836	.836	
	Mean Difference	.01	.01	
	Std. Error Difference	.052	.052	
	95% Confidence Interval of the Difference	Lower	-.092	-.092
		Upper	.113	.113

Table F.82a

How Likely to Accept Full-time Postsecondary Job, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How likely accept	1993	202	1.62	.717	.050
F:T pstsec job in 3 yr	1999	145	1.52	.698	.058

Table F.82b

How Likely to Accept Full-time Postsecondary Job, by Survey Year

		How likely accept F:T pstsec job in 3 yr	
		Equal variances assumed	Equal variances not assumed
Levene's Test for	F	.395	
Equality of Variances	Sig.	.530	
	t	1.380	1.386
	df	345	315.203
	Sig. (2-tailed)	.169	.167
t-test for Equality of	Mean Difference	.11	.11
Means	Std. Error Difference	.077	.077
	95% Confidence Interval		
	of the Difference	Lower	Lower
		Upper	Upper
		-.045	-.045
		.258	.258

Table F.83a

How Likely to Accept Part-time Non-postsecondary Job, by Survey Year

		How likely accept P:T nonpstsec job 3 yr	
		Equal variances assumed	Equal variances not assumed
Levene's Test for	F	5.735	
Equality of Variances	Sig.	.017	
	t	-1.370	-1.348
	df	345	291.488
	Sig. (2-tailed)	.172	.179
t-test for Equality of	Mean Difference	-.07	-.07
Means	Std. Error Difference	.053	.054
	95% Confidence Interval		
	of the Difference	Lower	Lower
		Upper	Upper
		-.178	-.180
		.032	.034

Table F.83b

How Likely to Accept Part-time Non-postsecondary Job, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How likely accept P/T nonpstsec job 3 yr	1993	202	1.17	.469	.033
	1999	145	1.24	.517	.043

Table F.84a

How Likely to Accept Full-time Non-postsecondary Job, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How likely accept F/T nonpstsec job 3 yr	1993	202	1.44	.660	.046
	1999	145	1.43	.675	.056

Table F.84b

How Likely to Accept Full-time Non-postsecondary Job, by Survey Year

		How likely accept F/T nonpstsec job 3 yr	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.045	
	Sig.	.832	
	t	.016	.016
	df	345	306.254
	Sig. (2-tailed)	.987	.987
t-test for Equality of Means	Mean Difference	.00	.00
	Std. Error Difference	.073	.073
	95% Confidence Interval of the Difference	Lower Upper	-.142 -.142 .144 .144

Table F.85a

How Likely to Retire in Next Three Years, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
How likely retire in 3 years	1993	202	1.13	.403	.028
	1999	145	1.20	.522	.043

Table F.85b

How Likely to Retire in Next Three Years, by Survey Year

		How likely retire in 3 years	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	8.188	
	Sig.	.004	
	t	-1.435	-1.377
	df	345	259.661
	Sig. (2-tailed)	.152	.170
t-test for Equality of Means	Mean Difference	-.07	-.07
	Std. Error Difference	.050	.052
	95% Confidence Interval of the Difference	Lower Upper	Lower Upper
		-.169 .026	-.173 .031

Table F.86a

Age Most Likely to Stop Working at Postsecondary Institution, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Age most likely to stop working at postsecondary institution	1993	140	64.39	7.601	.642
	1999	116	64.74	5.522	.513

Table F.86b

Age Most Likely to Stop Working at Postsecondary Institution, by Survey Year

		Age most likely to stop working at postsecondary institution	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	2.256	
	Sig.	.134	
	t	-.412	-.424
	df	254	249.909
	Sig. (2-tailed)	.681	.672
t-test for Equality of Means	Mean Difference	-.35	-.35
	Std. Error Difference	.846	.822
	95% Confidence Interval of the Difference	Lower Upper	Lower Upper
		-2.015 1.318	-1.967 1.270

Table F.87a

How Likely to Retire and Work Part-time at Institution, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Retire and work	1993	202	.42	1.576	.111
P.T at institution	1999	145	.59	1.530	.127

Table F.87b

How Likely to Retire and Work Part-time at Institution, by Survey Year

		Retire and work P T at institution	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	1.641	
	Sig.	.201	
	t	-1.017	-1.022
	df	345	315.712
	Sig. (2-tailed)	.310	.308
t-test for Equality of Means	Mean Difference	-.17	-.17
	Std. Error Difference	.169	.169
	95% Confidence Interval of the Difference	Lower Upper	Lower Upper
		-.506 .161	-.504 .159

Table F.88a

Would You Take Early Retirement, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Would you take early retirement	1993	202	.23	1.795	.126
	1999	145	.27	1.725	.143

Table F.88b

Would You Take Early Retirement, by Survey Year

		Would you take early retirement		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.456		
	Sig.	.118		
t-test for Equality of Means	t	-.215	-.216	
	df	345	317.433	
	Sig. (2-tailed)	.830	.829	
	Mean Difference	-.04	-.04	
	Std. Error Difference	.192	.191	
	95% Confidence Interval of the Difference	Lower	-.419	-.417
		Upper	.337	.334

Table F.89a

Age Likely to Retire from All Paid Employment, by Survey Year

	Survey Year	N	Mean	Std. Deviation	Std. Error Mean
Age likely retire from all paid employment	1993	135	66.38	6.105	.525
	1999	117	66.05	6.091	.563

Table F.89b

Age Likely to Retire from All Paid Employment, by Survey Year

		Age likely retire from all paid employment		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	.099		
	Sig.	.753		
t-test for Equality of Means	t	.424	.424	
	df	250	245.087	
	Sig. (2-tailed)	.672	.672	
	Mean Difference	.33	.33	
	Std. Error Difference	.770	.770	
	95% Confidence Interval of the Difference	Lower	-1.191	-1.190
		Upper	1.844	1.843

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