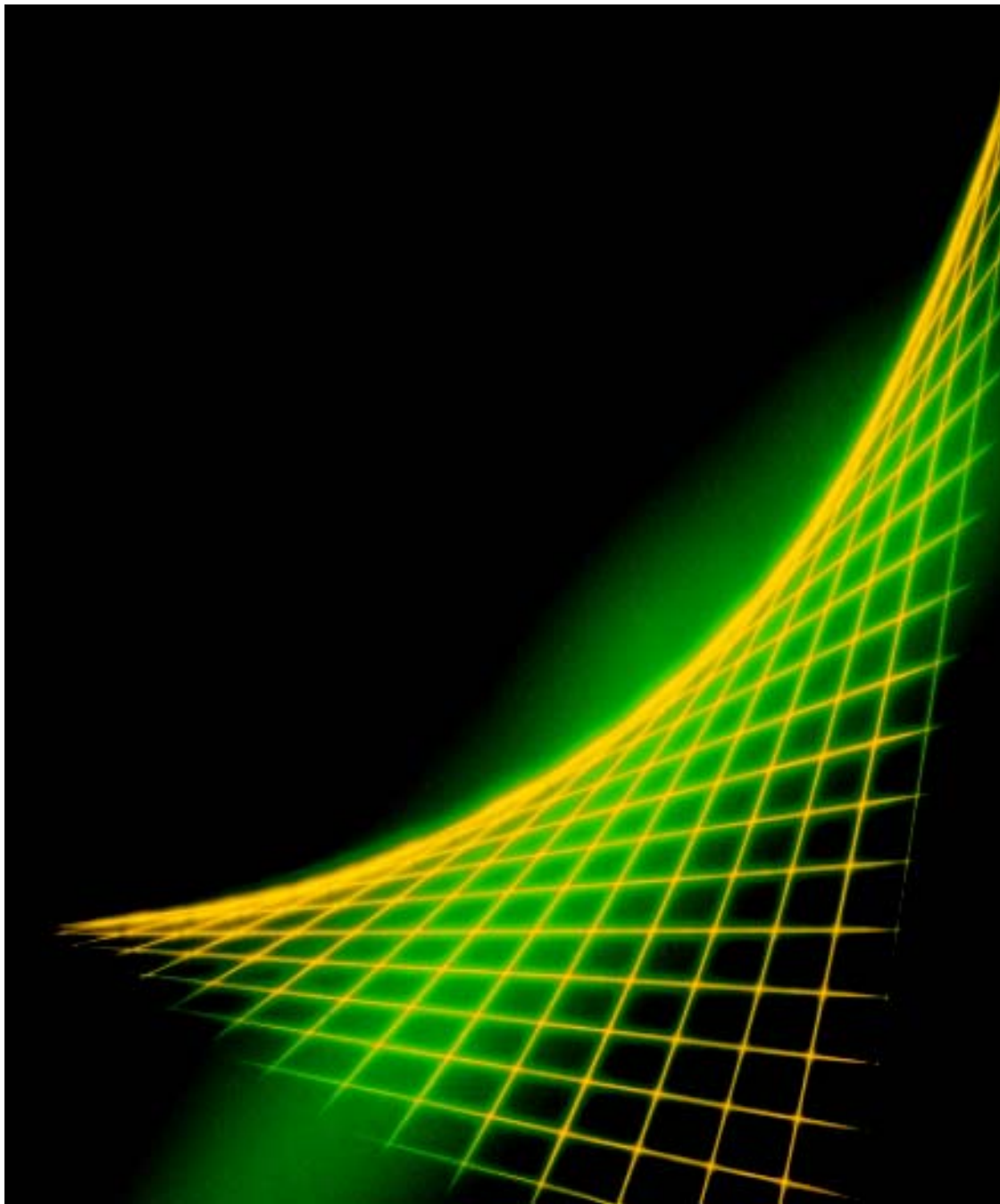

ACCOUNTING IN COMMUNITY COLLEGES: WHO TEACHES, WHO STUDIES?



A REPORT OF THE AMERICAN ACCOUNTING ASSOCIATION

• MARCH 29, 2010 •

ACCOUNTING IN COMMUNITY COLLEGES: WHO TEACHES, WHO STUDIES?

A REPORT OF THE AMERICAN ACCOUNTING ASSOCIATION

REPORT PREPARED BY:

David W. Leslie, Chancellor Professor of Education,
The College of William & Mary

RESEARCH PROJECT COORDINATOR:

Bruce K. Behn, The University of Tennessee

2009–2010 EXECUTIVE COMMITTEE MEMBERS
OF THE AMERICAN ACCOUNTING ASSOCIATION:

Nancy A. Bagranoff, Old Dominion University
Kevin D. Stocks, Brigham Young University
Susan F. Haka, Michigan State University
Ira Solomon, University of Illinois at Urbana–Champaign
Belverd E. Needles, DePaul University
Christopher J. Wolfe, Texas A&M University
Kazuo Hiramatsu, Kwansei Gakuin University
Robert H. Colson, Grant Thornton LLP
Jean C. Bedard, Bentley University
Gregory B. Waymire, Emory University
Bruce K. Behn, The University of Tennessee
Stacy E. Kovar, Kansas State University

MARCH 29, 2010

FOREWORD

Recently the American Accounting Association (AAA) sponsored a report, *Trends in Non-Tenure-Eligible Accounting Faculty, 1993–2004* (December 2008) and co-sponsored a report, *Accounting Faculty in U.S. Colleges and Universities: Status and Trends, 1993–2004* (February, 2008) with the American Institute of Certified Public Accountants (AICPA). Designed as a companion piece to these recent studies, this report is intended to expand our understanding of the “supply chain” in accounting education. A number of articles and papers discuss tenure-track and non-tenure track accounting faculty and accounting doctoral students, but limited information is available on the role of community college faculty in the United States. This analysis looks at status and trends for community college faculty in accounting, and like its companion reports on tenure-track and non-tenure eligible faculty, does so within the context of the larger higher education environment in the U.S. today.

Given their growing prominence in educating future accounting students it is important to better understand these members of our academic community. The U.S. Department of Education’s statistics center listed 1,528 two-year colleges in its 2007 survey of institutions of higher education.¹ The Department of Education reported that 6,617,930 (or 36.2%, more than one third) of all college students were enrolled in community colleges in 2007–08. About 47%, nearly half, of all students in *public* colleges and universities were enrolled in two-year colleges before attending a four-year institution.

In 2008 the recommendations of the U.S. Department of the Treasury’s Advisory Committee on the Auditing Profession urged the academy to: “Ensure a sufficiently robust supply of qualified accounting faculty to meet demand for the future and help prepare new entrants to the profession to perform high quality audits,” and “Develop and maintain consistent demographic and higher education program profile data.” Given growing numbers of community colleges and students enrolled in community colleges, it is critical that we understand trends for community college accounting faculty and their essential role in educating many accounting students.

With those interests in mind, we again asked David W. Leslie, Chancellor Professor Emeritus of Education, The College of William & Mary, to conduct our study. David has a distinguished career in demographic analysis extending across all levels of education. His recent report, *The Reshaping of America’s Academic Workforce*, for TIAA-CREF where he is an Institute Fellow, has been frequently quoted in the mainstream press. In the Fall of 2007, Leslie presented findings from the AAA/AICPA sponsored project *Accounting Faculty in U.S. Colleges and Universities: Status and Trends, 1993–2004*, during testimony to the Advisory Committee on the Audit Profession to the U.S. Treasury Department in Washington, D.C. The Advisory Committee, chaired by former Securities and Exchange Commission (SEC) Chairman Arthur Levitt and former SEC Chief Accountant Don Nicholiason, was chartered to consider and develop recommendations relating to the sustainability of the auditing profession including implications for education and preparation of new practitioners.

It is the continual pursuit of the AAA to add value to the accounting community by gathering data and perspectives from outside the accounting environment, providing a context in which to

¹ Data extracted from the Integrated Postsecondary Education Data System (IPEDS) Data Analysis System, <http://nces.ed.gov/ipeds/datacenter/>

better understand the state of accounting education, allowing us to better forecast challenges and opportunities for the future. The American Accounting Association thanks David Leslie for the continued energy and creativity he brings to understanding accounting education. David would like to thank Susan Crosson, and AAA Executive Committee members Kevin Stocks, Nancy Bagranoff, and Bruce Behn for their review and comments during completion of this report.

TABLE OF CONTENTS

Executive Summary	7
Introduction	9
Institutional Context	11
Characteristics of Accounting Faculty at Two-Year Colleges	15
Characteristics of Accounting Students at Two-Year Colleges	31
Summary and Conclusions	39
Appendix A	41
References	43

EXECUTIVE SUMMARY

This report describes the members of the faculty work force who teach accounting at community colleges and the students who say they are concentrating in accounting at these institutions. It is presented in three parts. The first, "Institutional Context," presents general data on two-year institutions. The second, "Characteristics of Accounting Faculty at Two-Year Colleges," relies on National Study of Postsecondary Faculty (NSOPF) data to cover the demographic characteristics, career trajectories, and work patterns among those who teach in the nation's community colleges. The third, "Characteristics of Accounting Students at Two-Year Colleges," describes those who self-report that their field of study/major is in accounting using data from the National Postsecondary Student Aid Study (NPSAS).

Overall, faculty and students at two-year institutions differ in many ways from those at four-year institutions. A large majority of both faculty and students at two-year institutions are part-time. Both faculty and students are also far more likely to be employed elsewhere. Faculty are less likely to have terminal degrees or their highest degree in accounting than are those at four-year institutions. Students are substantially more likely to be female, are more career-oriented (than transfer-oriented), and appear to be less prepared for college-level courses.

Roughly 38% of all accounting faculty in the U.S. teach at community colleges, and about two-thirds of accounting faculty at two-year institutions teach part-time. It is estimated that the number of accounting faculty at two-year institutions has declined on the order of 11% between 1993 and 2004, while the number of accounting students at these institutions increased almost 8% (from 189,400 to 203,900) between 1990 and 2008.

Faculty teaching accounting at two-year institutions are increasingly female, mostly Caucasian, hold master's degrees or less, and are often teaching in a field in which they have not earned their highest degree. They tend to be otherwise employed and have multiple sources of income. About 90% report being either satisfied or very satisfied with their jobs.

Two-year institutions educate a far more diverse student population than do traditional four-year institutions, diverse in characteristics, preparation, life experience, motives, and educational/occupational/career trajectories. Roughly 40% of all students who report concentrating in accounting enroll at two-year institutions and about 19% of accounting majors at four-year institutions had earned at least some transfer credits (not necessarily in accounting) from an associate-degree-granting institution in 2008.

Almost 60% of these students indicate that their primary motive is to gain occupational skills, while only 40% indicate plans to transfer to a four-year institution. About 70% are female, and over three-quarters are White. Over half, 52% were older than 27 in 2008, consistent with the range in age of all students at two-year institutions. Three quarters work full- or part-time while in school, and enter with more academic "risk factors" than do students at four-year institutions.

Principal characteristics that differentiate two-year accounting faculty and students from those at four-year institutions are the proportion engaged in either teaching or learning on a part-time basis, and the proportions who are either partially or fully employed elsewhere. Most two-year faculty do not have terminal degrees (just over 11%, and about 70.5% held a master's degree in 2004), nor their highest degree in accounting, and teach an older and substantially at-risk student population with multiple reasons for investing in higher education.

These differences highlight the need to understand more fully how teaching and learning of accounting varies among types of institutions, and in particular, how those who ultimately transfer from two-year programs to upper division classes at four-year institutions are prepared. What these students learn and how they learn it may ultimately affect both the practice and broader understanding of the field's concepts and principles in business, government, and the profession itself.

INTRODUCTION

This report describes the members of the faculty work force who teach accounting at community colleges (using data from 1993 and 2004 federal surveys of faculty¹) and the students who report they are concentrating in accounting at these institutions (using data from surveys conducted in 1990, 1996, 2000, and 2008²). This report is third in a three-part series by the American Accounting Association focusing on understanding trends for the accounting faculty workforce.³ Relying on survey data available online from the National Postsecondary Student Aid Study (NPSAS) and the National Study of Postsecondary Faculty (NSOPF) administered by the National Center for Education Statistics, this report is similar in method and scope to two previous studies of full-time tenure-track, and non-tenure-track faculty in accounting.

The U. S. Education Department's statistics center listed 1,528 two-year colleges in its 2007 survey of institutions of higher education.⁴ The Education Department reported that 6,617,930 (or 36.2%, more than 1/3) of all college students were enrolled in community colleges in 2007–08. About 47%, nearly half, of all students in *public* colleges and universities were enrolled in two-year colleges before attending a four-year institution. And about 49% of all undergraduates were enrolled in a two-year institution at some point. There are reasons to expect that these

¹ National Survey of Postsecondary Faculty, <http://nces.ed.gov/surveys/nsopf/>. "NSOPF was conducted in response to a continuing need for data on faculty and instructors – persons who directly affect the quality of education in postsecondary institutions. Faculty are the pivotal resource around which the process and outcomes of postsecondary education revolve. They often determine curriculum content, student performance standards, and the quality of students' preparation for careers. Faculty members perform research and development work upon which this nation's technological and economic advancement depends. Through their public service activities, they make valuable contributions to society. For these reasons, it is essential to understand who they are; what they do; and whether, how, and why they are changing. This study was designed to provide data about faculty to postsecondary education researchers, planners, and policymakers. NSOPF is the most comprehensive study of faculty in postsecondary educational institutions ever undertaken." NSOPF was conducted in four cycles: 1987–88, 1992–93, 1998–99, and 2003–04. Because survey items are not always consistent from cycle to cycle, and because a reasonably long period was desirable to establish trends, this report relies on the 1993 and 2004 survey data. The two previous reports on accounting faculty relied on these surveys, as well, so results can be compared. No further faculty surveys are planned, according to NCES staff, so the 2004 data are the most current available.

² "The purpose of NPSAS (National Postsecondary Student Aid Study) is to compile a comprehensive research dataset, based on student-level records, on financial aid provided by the federal government, the states, postsecondary institutions, employers, and private agencies, along with student demographic and enrollment data. NPSAS is the primary source of information used by the federal government (and others, such as researchers and higher education associations) to analyze student financial aid and to inform public policy on such programs as the Pell grants and Stafford loans." <http://nces.ed.gov/surveys/npsas/about.asp>. "The first NPSAS study was conducted during the 1986–87 school year; subsequent studies have been carried out during the 1989–90, 1992–93, 1995–96, 1999–2000, 2003–04, and 2007–08 school years." <http://nces.ed.gov/surveys/npsas/> (It is only possible to break out accounting majors in the 1989–90, 1992–93, 1995–96, 1999–2000, and 2007–08 data. Appendix A presents anomalies in the 1992–93 NPSAS data – a large departure from standard Education Department data on enrollment – to justify omitting those data from tables in this report, a conclusion in which National Center for Education Statistics (NCES) staff concur.)

³ See *Accounting Faculty in U. S. Colleges and Universities: Status and Trends, 1993–2004*. Sarasota: American Accounting Association (and American Institute of Certified Public Accountants), 2008. <http://aaahq.org/temp/phd/AccountingFacultyUSCollegesUniv.pdf>. Also, *Trends in Non-Tenure-Eligible Accounting Faculty, 1993–2004*, Sarasota: American Accounting Association, 2009. <http://aaahq.org/temp/phd/LeslieReport2.pdf>.

⁴ Data extracted from the Integrated Postsecondary Education Data System (IPEDS) Data Analysis System, <http://nces.ed.gov/ipeds/datacenter/>.

trends will continue or increase. With economic challenges facing many families and individuals in the current environment, tuition and fees at four-year institutions have risen beyond the reach of more prospective students, leading them to apply to community colleges in increasing numbers. Similarly, as unemployment rises, more workers will undoubtedly opt to retrain by returning to college and community colleges are expected to absorb a large proportion of these students.⁵ In addition, expanded GI Bill benefits may encourage large numbers of veterans to attend community college.⁶

Overall this study finds that faculty who teach and students who study at two-year institutions differ in many ways from those at more traditional four-year institutions. The major difference is that a large majority of both faculty and students at two-year institutions are part-time. Both faculty and students are also far more likely to be employed elsewhere. Faculty are less likely to have terminal degrees (11.2%, and 70.5% have a master's in 2004) or their highest degree in accounting than are those at four-year institutions. Students are substantially more likely to be female, are more career-oriented (than transfer-oriented), and appear to be less prepared for college-level courses.

Part-time faculty at two-year institutions (two-thirds of the total) spend more time on their other jobs (about three-quarters of their working hours) than on teaching and research. Students who transfer from two-year to four-year institutions may find that faculty at their new institutions have a different, perhaps more intensively disciplinary, orientation to the field. Students' own work experience may help them understand basic ideas and practices in introductory courses, but their experience may not be as relevant in upper-level courses. Adapting to a different set of expectations following transfer may involve some "transfer shock."⁷ By understanding the variety of motives with which students enroll in two-year institutions, as well as their more varied backgrounds, faculty at both two-year and four-year institutions may be better prepared to adopt varied and nuanced approaches to teaching and learning that take this variability into account.

This report describes the characteristics of both faculty and students and discusses some of the implications for the field. It is presented in three parts. The first, "Institutional Context," presents general data on two-year institutions. The second, "Characteristics of Accounting Faculty at Two-Year Colleges," relies on NSOPF data to cover the demographic characteristics, career trajectories, and work patterns among those who teach in the nation's community colleges. The third, "Characteristics of Accounting Students at Two-Year Institutions," describes those who have enrolled at these institutions who self-report that their field of study/major⁸ is in accounting.

⁵ Both the *New York Times* and *Washington Post* have recently run stories highlighting enrollment pressures at community colleges. See http://www.nytimes.com/2009/10/28/education/28community.html?_r=1&scp=2&sq=community%20college&st=cse. And see: <http://www.washingtonpost.com/wp-dyn/content/article/2009/05/30/AR2009053001762.html?hpid=topnews>.

⁶ See Chen, G. *How Will the New GI Bill Impact Your Community College Enrollment Options?* Community College Review. July 9, 2009. <http://www.communitycollegereview.com/articles/130>.

⁷ See Ishitani, T. T. How Do Transfers Survive after "Transfer Shock"? A Longitudinal Study of Transfer Student Departure at a Four-Year Institution. *Research in Higher Education*. 49: 403-419, 2008.

⁸ "Field of study or major" is the terminology used in the NPSAS survey. Students at two-year institutions may not settle on a major until after transfer to a four-year institution. Accordingly, the estimates in this report may not "capture" all students who enter two-year institutions but ultimately receive baccalaureate or higher degrees in Accounting.

I. INSTITUTIONAL CONTEXT

Two-year (or community) colleges are mostly public; about 28% of all college and university faculty teach in these institutions. About 95% of those teaching accounting full or part-time at the two-year level teach in public institutions. The most recently available data (2004) estimate that only about 400 faculty teach accounting in private two-year institutions.

These institutions are typically relatively small, although some, such as Miami-Dade Community College in Florida (with over 86,000 students), are among the nation's largest postsecondary institutions. On the average, in terms of full-time equivalent (FTE) student enrollment, they are roughly the same size as non-doctoral four-year institutions. Table 1 shows the comparative sizes of three broad types of institution.

TABLE 1
Estimated Full-Time Equivalent Enrollment by Type of Institution, 1993–2004

	<u>1993</u>	<u>2004</u>
Two-year	5,297	6,124
Four-year non-doctoral	5,684	5,937
Doctoral	19,560	18,892

Two-year institutions enroll only undergraduate students, and are principally teaching and service oriented with many vocational and certificate as well as economic development and public service programs, differentiating them from four-year institutions.⁹ They generally have higher student/faculty ratios and lower instructional expenditures per full-time-equivalent (FTE) student than four-year institutions (Table 2).

TABLE 2
FTE Students to FTE Faculty, and Instructional Expenditures per FTE Student, 2004

	<u>Ratio of FTE Students/ FTE Faculty</u>	<u>Instructional Expenditures/ FTE Student</u>
Two-year	16.86	\$3,721.18
Four-year non-doctoral	14.90	\$5,636.67
Doctoral	11.30	\$13,212.83

Estimated Number of Accounting Faculty. Roughly 38% of all accounting faculty in the U.S. teach at two-year (community) colleges.

That proportion did not materially change between 1993 and 2004, as the number of accounting faculty declined at both two-year and four-year institutions between 1993 and 2004 (Table 3).

Roughly two-thirds of all accounting faculty at two-year institutions teach part-time (Table 4). (Just over 75% of the part-timers reported spending 12 hours or less on their teaching jobs in the 2004 survey.)

⁹ See the American Association for Community Colleges' website for an overview: <http://webadmin.aacc.nche.edu/AboutCC/Pages/default.aspx>.

TABLE 3
Estimated Number¹⁰ of Accounting Faculty, 1993–2004

	<u>1993</u>	<u>2004</u>	<u>Percent Change</u>
Two-year (community) colleges	7,600	6,700	-11.3%
Four-year (baccalaureate and higher) colleges and universities	12,700	10,800	-14.6%
Total	20,300	17,500	-13.3%

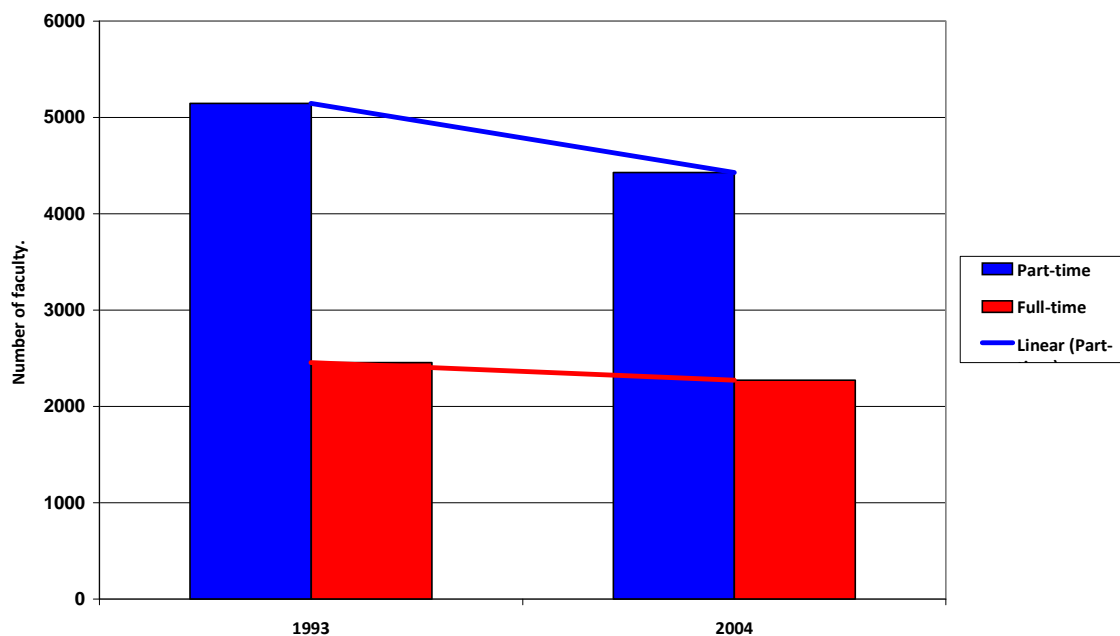
TABLE 4
Part- and Full-Time Status of Accounting Faculty at Two-Year Institutions, 1993–2004

	<u>1993</u>	<u>2004</u>	<u>Percent Change</u>
Part-time	5145	4429	-13.90%
Full-time	2455	2271	-7.50%
Percent part-time	67.70%	66.10%	

Figure 1 illustrates the comparative number of part- and full-time accounting faculty in community colleges in 1993 and 2004.

This proportion is roughly characteristic of all fields, as part-time and otherwise non-tenure-eligible faculty make up the large majority (75% in 2004) of all community college faculty.

FIGURE 1
Number of Full- and Part-Time Accounting Faculty in Community Colleges, 1993–2004



¹⁰ Minor differences occur among estimates in tables; rounding errors and slightly different specifications submitted to the Data Analysis System from which these data were obtained are responsible. In addition, the number of respondents to individual survey items varies and weighted estimates therefore vary, as well. Figures in tables are generally rounded to the nearest 100.

Estimated Number of Accounting Students. NPSAS (National Postsecondary Student Aid Study) data showed an estimated 189,400 undergraduate students reporting an accounting field of study/major at two-year institutions in 1990, and about 203,900 in 2008, a net increase of about 14,500, or about 7.7%. Accounting enrollment increased even more at four-year institutions during this period. (Non-doctoral four-year institutions showed an increase of 29.8%; four-year doctoral institutions showed a net increase of 25.4%). In 2008, about 40% of students who reported a field of study/major in accounting were enrolled at two-year institutions. (Table 5).¹¹

Figure 1A illustrates the trends in estimated number of students self-reporting accounting majors by type of institution from 1996–2008.

Figure 1B compares estimated trends in the numbers of accounting faculty and students over the period (using transformed data¹² for illustrative purposes). The survey years do not correspond, either in their respective timing, nor in frequency,¹³ so the comparisons may be less than precise. But the linear trends clearly show an increase in numbers of undergraduate students and a decline in numbers of faculty; similar trends exist for two-year and four-year institutions.

NPSAS data for 2008 provide for an estimate that 16.4% of all accounting majors at four-year institutions report having earned an associate's degree, 40.1% of accounting majors at two-year institutions indicated plans to transfer to a four-year institution, and about 45% of all accounting majors at four-year institutions report having attended a two-year school at some point (with or without receiving credit to transfer).

TABLE 5
Estimated Number of Accounting Majors (in 1000s) by Type of Institution, 1990–2008

	<u>1990</u>	<u>1996</u>	<u>2000</u>	<u>2008</u>	<u>Net Change, 1990–2008</u>
Two-year	189.4	139.1	173.8	203.9	7.7%
Four-year non-doctoral	142.5	129.4	127.3	184.9	29.8%
Four-year doctoral	92.9	61.0	69.7	116.5	25.4%
Total	424.8	329.5	370.8	505.3	19.0%
Percent at two-year institutions	44.5%	42.2%	46.9%	40.4%	

¹¹ NCES staff caution that the sample in NPSAS surveys may not accurately represent the number of actual majors by discipline because data are based on students' reports of their area of field of study/major. Further, fields of study/majors were defined in a slightly different way on the 2008 survey; although over-inclusion of accounting as a field of study/major is one possible result, Appendix A shows that analyses of two independent sources of data suggest that this did not occur. The estimates in Table 5 are based on the total number of respondents to NPSAS surveys, whether full-time or part-time. The proportion of respondents attending two-year institutions part-time is far higher (about 65%) than the proportion attending part-time at four-year doctoral institutions (21%). Students at two-year institutions are also far less stable in their enrollment patterns (e.g., stopping out for a semester, attending more than one institution simultaneously) than those at four-year institutions. Accordingly, the tables and figures should be interpreted carefully. For reasons explained in Appendix A, 1993 data are not included.

¹² Numbers of faculty and students were converted to logarithms and the two sets "mapped" onto a similar scale by adding a constant to the logarithms of faculty numbers. A linear transformation was imposed on the data using Excel to span the gaps between years when data were not available.

¹³ Faculty surveys were conducted in 1993 and 2004; student surveys were conducted in 1990, 1996, 2000, and 2008.

FIGURE 1A
Enrollment Trend, Accounting Majors by Type of Institution, 1990–2008

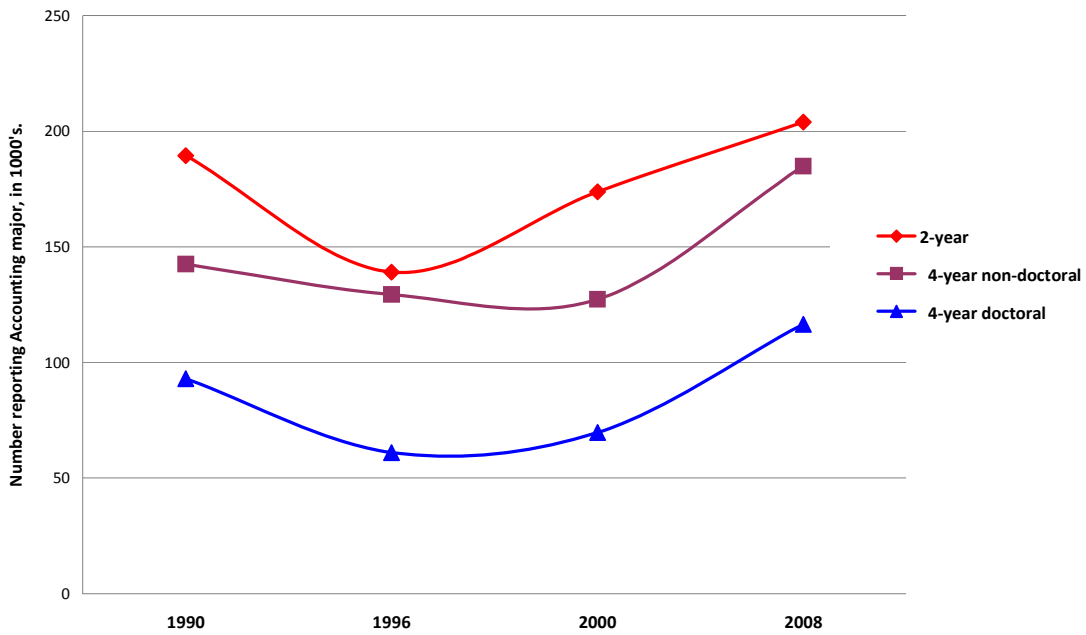
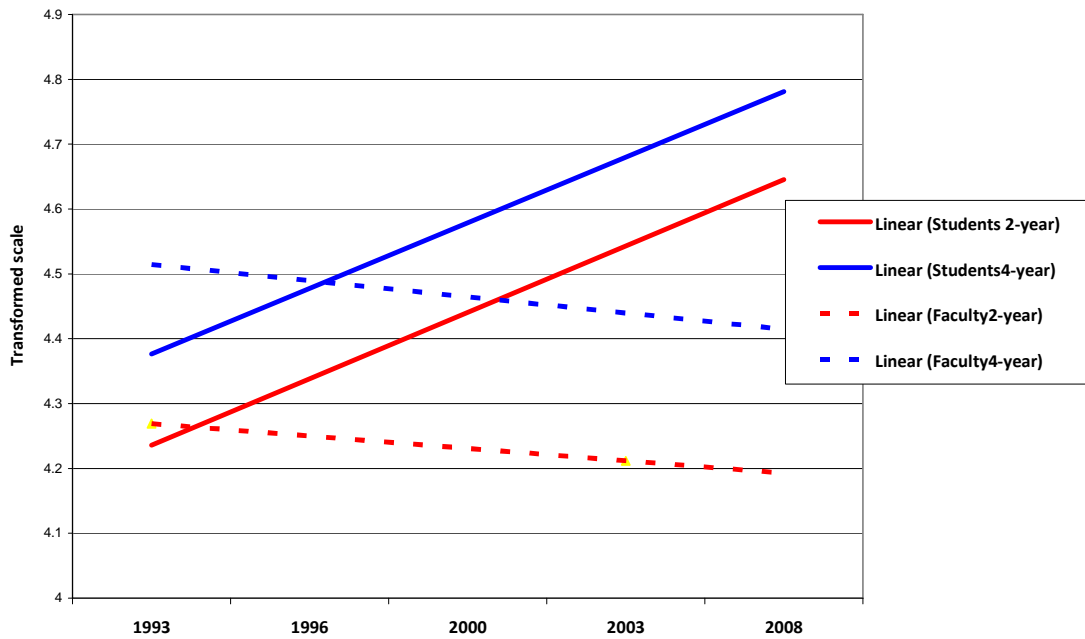


FIGURE 1B
Linear Trends in Transformed Numbers (estimated) of Accounting Faculty and Students, 1993–2008



II. CHARACTERISTICS OF ACCOUNTING FACULTY AT TWO-YEAR COLLEGES

Faculty who teach accounting at two-year institutions are mostly part-time, increasingly female, Caucasian, married with children, hold master's degrees or less, and are often teaching in a field in which they have not earned their highest degree. They also tend to be otherwise employed and have multiple sources of income.

Gender. In 1993, roughly 70% of community college accounting faculty were males (Table 6). By 2004, there were about 1400 fewer male accounting faculty, but about 500 more females. The proportion of males had dropped to 58%.

Perhaps more interesting, the genders differed in their employment pattern; males were much more likely to be part-time by 2004. In fact, there were only about half as many full-time male accounting faculty in 2004 as in 1993. Women, on the other hand, were almost twice as likely to be full-time in 2004 as in 1993 (Table 7).

Ethnicity. Accounting faculty in two-year institutions were overwhelmingly White, and remained so between 1993 and 2004 (Table 8). There was an uptick in the percentage of those identifying themselves as Black, and a decline in those identifying as Hispanic. Whites constituted about 85% of *all* accounting faculty at two-year institutions in 2004, Blacks constituted 10.6% (more than double their proportion in 1993), Hispanics declined from 5.3% to 1.0%, and Asian/Pacific

TABLE 6
Gender of Community College Accounting Faculty, 1993–2004

	1993	2004	Percent Change
Male	5300	3900	-26.4%
Female	2300	2800	+21.7%
Total	7600	6700	-11.8%
Percent male	69.7%	58.2%	

TABLE 7
**Part- and Full-Time Status of Community College Accounting Faculty
by Gender, 1993–2004**

	1993 Part-Time	2004 Part-Time	Percent Change in Part-Time Faculty	1993 Full-Time	2004 Full-Time	Percent Change in Full-Time Faculty
Male	3551	2968	-16.4%	1749	932	-46.7%
Female	1594	1459	-8.5%	706	1341	+89.9%

TABLE 8
Race/Ethnicity of Accounting Faculty in Two-Year Institutions (percentages), 1993–2004

	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native
1993	85.6%	4.3%	5.3%	3.3%	1.6%
2004	85.2%	10.6%	1.0%	3.2%	0%

Islanders constituted 3.2%. American Indian/Alaska Natives declined from 1.6% to 0. Accounting faculty in two-year institutions are distributed roughly in proportion to their ethnic distribution at four-year institutions.

Age. Figure 2 shows that the age distribution of accounting faculty at two-year institutions shifted upward, consistent with indicators of aging found in earlier studies in this series.

The shift was particularly apparent among part-time faculty, with a sharp decline in faculty between the ages of 40 and 50, and a tripling of those over the age of 55, as shown in Figure 3.

The age distribution of full-timers shifted upward, but mainly with respect to the mode (Figure 4); overall, the mean age of part-timers was three years lower than that of full-timers in 1993, but a year higher in 2004 (Table 9).

The principal finding in this section is aging among male accounting faculty. Nearly 45% were 55 or older in 2004, while only 16% were 44 or younger. Among females, 17% were 55 or older, while 43% were 44 or younger. Figure 5 illustrates the disproportionately older distribution of males and younger distribution of females. About 41% of males report planning to retire “from all paid employment” within 10 years of the survey. An increasing number of women are teaching accounting in two-year institutions, not just as part-timers, but increasingly in full-time

FIGURE 2
Age Distribution of Accounting Faculty in Two-Year Institutions, 1993–2004

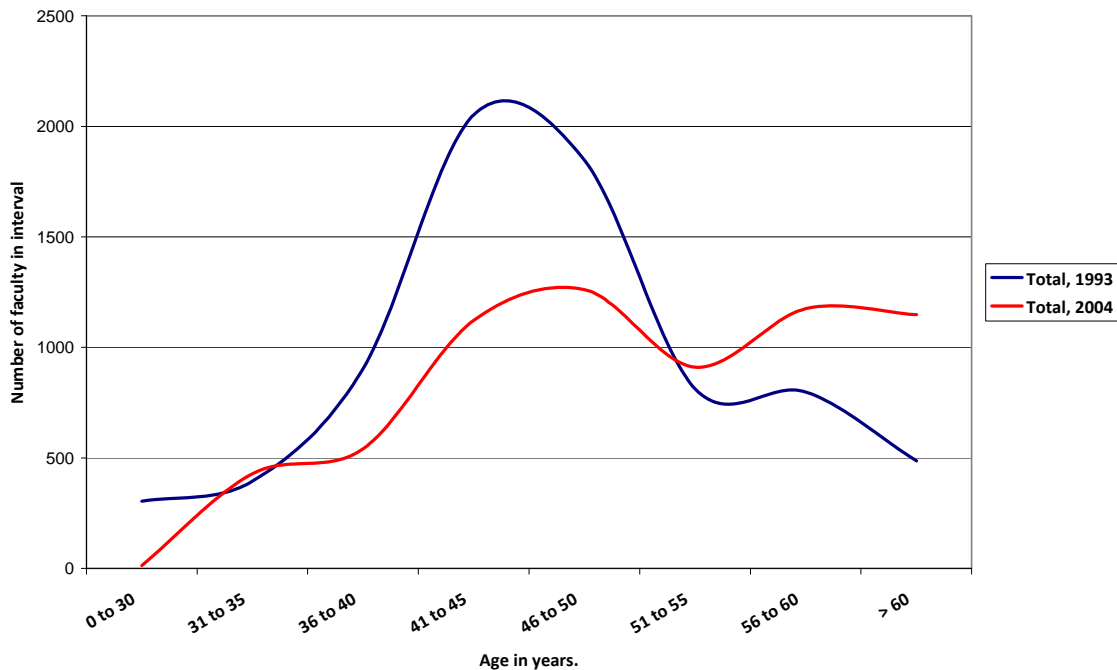


TABLE 9
Mean Age of Accounting Faculty in Two-Year Institutions, 1993–2004

	Mean Age, 1993	Mean Age, 2004
Part-time	45.53	51.67
Full-time	48.95	50.82

FIGURE 3
Age Distribution of Part-Time Community College Accounting Faculty, 1993–2004

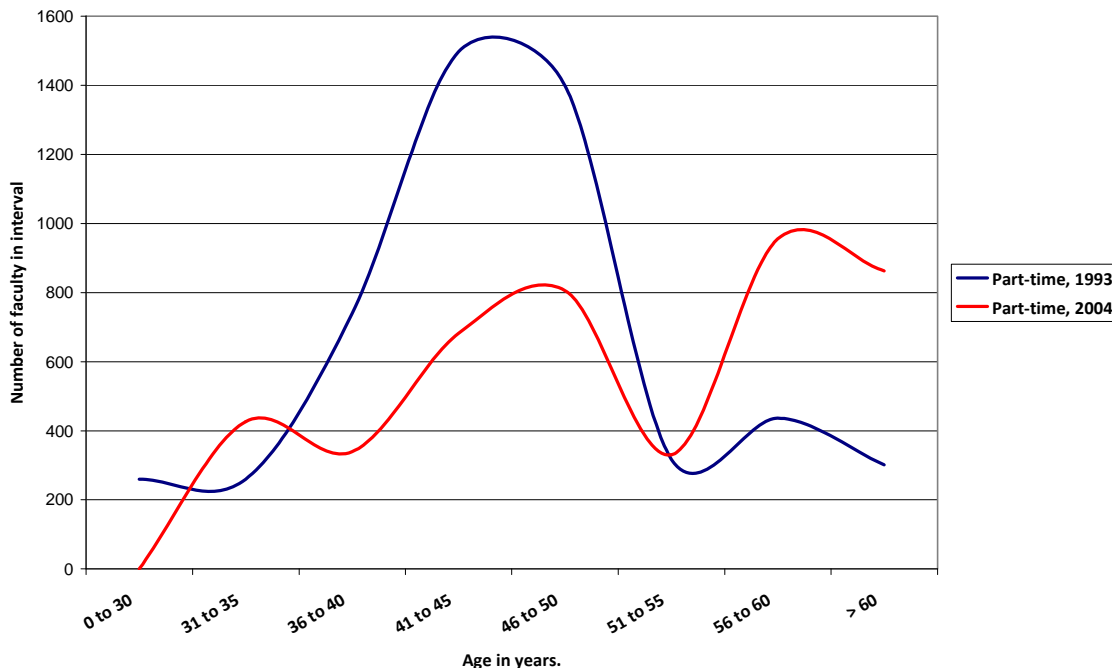
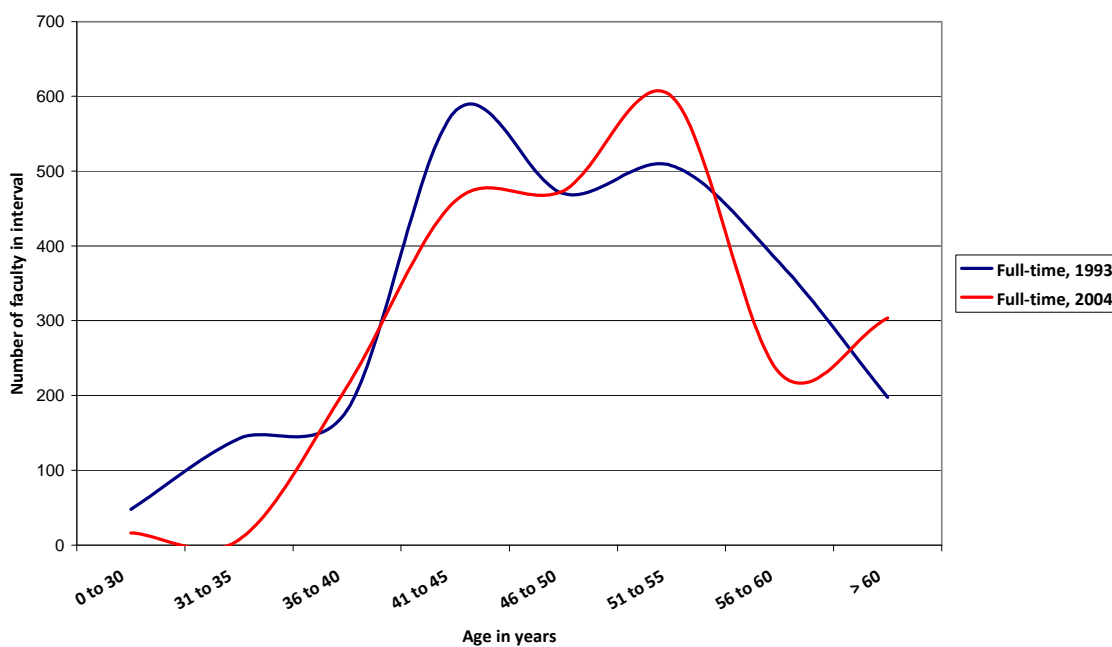


FIGURE 4
Age Distribution of Full-Time Accounting Faculty at Two-Year Institutions, 1993–2004



positions. There were 22% more women teaching accounting at two-year institutions in 2004 than in 1993, but about 16% fewer women teaching accounting at four-year institutions in 2004 than in 1993.

Other Employment. Most part-time accounting faculty at two-year institutions have other employment, as does an apparently declining proportion of full-time faculty. Table 10 shows, however, that a substantial shift took place between 1993 and 2004. An increased proportion of both part- and full-time faculty reported that their teaching job was their only job. Consistent with this trend, many fewer part-timers reported holding other full-time jobs in 2004 than reported doing so in 1993. Table 11 shows that although over 84% held other full-time jobs in 1993, fewer than half did so in 2004.

Sources of Income. Accounting faculty at two-year institutions earn substantially less, on the whole, than do accounting faculty at four-year institutions. In 2004, full-time accounting faculty

FIGURE 5
Age Distribution of Accounting Faculty in Two-Year Institutions by Gender, 2004

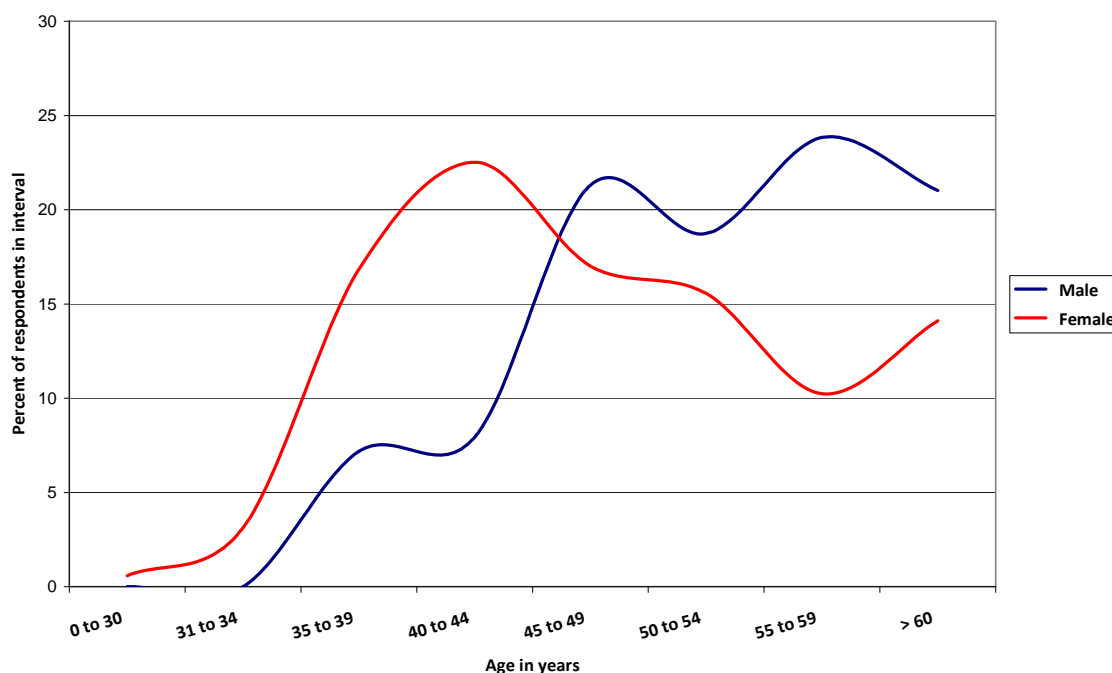


TABLE 10
Percentage of Accounting Faculty at Two-Year Institutions Reporting "Other Employment" than their Teaching Job, 1993–2004

	<u>1993</u>	<u>2004</u>
Part-time	88.60%	72.70%
Full-time	34.50%	21.10%
Total	71.10%	55.20%

TABLE 11
Full- or Part-Time Status of Other Jobs Held by Part-Time Accounting Faculty in Two-Year Institutions, 1993–2004

	<u>1993</u>	<u>2004</u>
Other job part-time	15.8%	52.2%
Other job full-time	84.2%	47.8%

at two-year institutions averaged \$53,622.80 in basic salary from their employing institutions (Table 12). Full-time accounting faculty at four-year institutions averaged \$83,011.20 in the same year. Part-time accounting faculty at two-year institutions averaged \$8,157.40 in basic salary, while part-timers at four-year institutions averaged \$11,973.90. In rough terms then, two-year accounting faculty make about two-thirds the basic salary made by four-year accounting faculty.

Part- and full time faculty look more alike in income when all sources are included in the analysis. Table 13 shows that part-timers actually earned slightly more in total income than full-timers in 1993, but they had lost considerable ground (measured in constant dollars), both absolutely (-18%) and relatively to full-timers by 2004. These trends are likely affected by the substantial drop in percentage of part-time faculty holding other full-time jobs (Table 11), which, for most, would presumably be their main source of income.

Career and Work Patterns

Faculty prepare for their teaching careers by earning (almost universally) graduate degrees. Their “career” patterns can be characterized by examining their employment history. “Work” patterns can be described by what individuals do in their present positions. This section reports on degrees earned by community college faculty, their career histories, and work patterns and activities.

Highest Degree Earned.¹⁴ In most two-year institutions faculty are expected to hold a master’s degree or higher in the subject field in which they teach, and this is the case in accounting as well. Data from NSOPF indicate that the large majority accounting faculty at two-year colleges held the master’s as their highest degree (Table 14).

As of 2004, 11.2% held the doctorate or first professional degree, just over 70% a master’s degree, and 18.3% a baccalaureate or less. The proportion holding a master’s degree or higher increased, while the proportion holding less than a master’s degree decreased. (This compares to 48.2% of accounting faculty at four-year institutions holding the doctorate or first professional

TABLE 12
Mean Basic Salary (in constant \$) from Institution, Accounting Faculty
at Two-Year Institutions, 1993–2004

	1993 (Inflated)	2004	Change
Part-time	\$7,176.32	\$8,157.40	+13.6%
Full-time	\$49,353.78	\$53,622.8	+8.6%

TABLE 13
Mean Total Individual Income (in constant \$), Accounting Faculty
at Two-Year Institutions, 1993 (inflated)–2004

	1993 (Inflated)	2004	Change
Part-time	\$65,371.61	\$53,486.80	-18.2%
Full-time	\$62,011.74	\$70,528.70	+13.7%

¹⁴ The NSOPF survey includes the J.D. (or L.L.B.) as a “first professional degree.” The M.B.A. is included among master’s degrees.

degree.) Table 15 breaks down the highest degree held by part- and full-time faculty at two-year institutions. Full-time faculty were slightly more likely to hold a doctorate or first professional degree, and the higher degrees were slightly more prevalent for both full- and part-time faculty in two-year institutions in 2004 than in 1993.

Perhaps more importantly, only half of the accounting faculty at two-year institutions report holding their highest degree in accounting. (Faculty in two-year institutions may have more incentives to earn advanced degrees in education than in their teaching field; 6.2% of full-time accounting faculty at two-year institutions report their highest degree in education compared to 1.1% of full-time accounting faculty at four-year institutions.) For both survey years, almost exactly half (Table 16) reported that their highest degree was in accounting. More (37% versus 32%) earned their highest degrees in another business field in 2004 than in 1993. (Although it is not traceable, it would seem likely that this reflects an increase in numbers of those holding MBAs teaching accounting). Commensurately fewer earned degrees in fields other than accounting or business in 2004 than in 1993.

Table 16A shows that accounting faculty at two-year institutions were less likely to have earned their highest degree in accounting than faculty at four-year institutions.

Careers. Data on career history are inconsistent between the two NSOPF survey years included in this comparison, but some inferences are possible. On average, accounting faculty in two-year institutions hold their jobs for substantial periods of time. Table 17 shows that full-timers have typically held their jobs for about 12 years, while part-timers have typically held theirs for

TABLE 14

Percent of Accounting Faculty in Two-Year Institutions Holding Indicated Highest Degree, 1993–2004

	<u>1993</u>	<u>2004</u>
Ph.D. or first professional	9.60%	11.22%
Master's	60.80%	70.47%
Baccalaureate or less	29.60%	18.31%

TABLE 15

Percentage of Accounting Faculty in Two-Year Institutions with Doctorate or First Professional Degree by Full- or Part-Time Status

	<u>1993</u>	<u>2004</u>
Part-time	8.3%	10.4%
Full-time	12.7%	12.8%
Total	9.7%	11.2%

TABLE 16

Field of Highest Degree Earned, Accounting Faculty in Two-Year Institutions, 1993–2004

	<u>1993</u>	<u>2004</u>
Accounting	51.3%	50.8%
Other business	31.6%	37.3%
All other fields	17.1%	11.9%

about 7 years. (These figures differ very little from those for accounting faculty at four-year institutions.)

Continuity of Employment. Full-time faculty at two-year institutions show considerable longevity (stability) in their positions, while part-timers are more likely to have assumed their positions more recently. Almost 40% of all part-time two-year faculty reported two years or less of experience in their current positions. (About 49% of part-time accounting faculty at four-year institutions also report two years or less of experience, but they constitute a far lower proportion of all faculty teaching accounting. About one-third of all accounting faculty at two-year institutions may have little teaching experience.) Figure 6 shows the distribution of “years held current job” for both groups as represented in the data from the 2004 NSOPF.

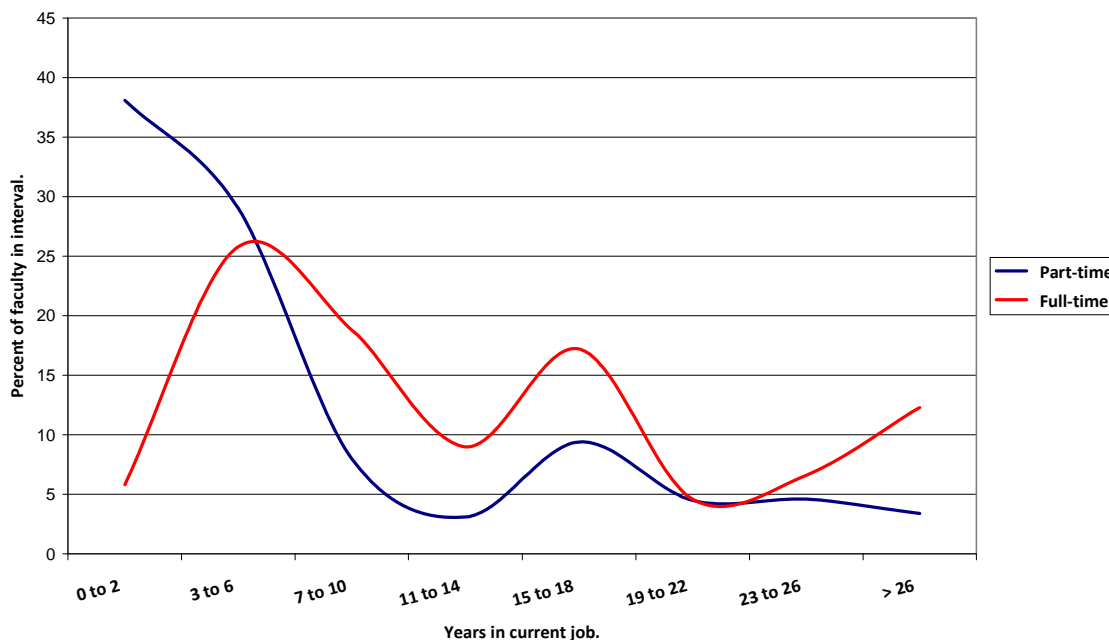
TABLE 16A
Field of Highest Degree Earned, Accounting Faculty
at Two-Year and Four-Year Institutions, 2004

	Two-Year	Four-Year
Accounting	50.8%	62.4%
Other business	37.3%	27.5%
All other fields	11.9%	10.1%

TABLE 17
Mean Years in Current Job, Accounting Faculty in Two-Year Institutions, 1993–2004

	1993	2004
Part-time	6.62	7.41
Full-time	13.16	12.75

FIGURE 6
Years in Current Job; Full- and Part-Time Accounting Faculty in Two-Year Institutions, 2004



The majority of part-time accounting faculty in two-year institutions have held previous jobs in fields other than education. About 58% had worked outside education in 1993, and 76% had done so in 2004. Fewer than half (34% in 1993 and 44% in 2004) of the full-time faculty had worked outside education. So, as has often been contended, part-time faculty may bring a broader and deeper range of practical or clinical experience (in place of advanced degrees) to the classroom. A similar pattern was observed among accounting faculty at four-year institutions, with part-timers far more likely to have worked outside education. The difference between backgrounds of two-year and four-year faculty is important because two-year students are far more likely to take their courses from part-timers, and may therefore have more exposure to the practical and clinical aspects of the field (and commensurately less to the more theoretical, research-based aspects).

Tenure. Tenure or eligibility for tenure is far less common among two-year faculty than among those at four-year institutions. Only 22% of accounting faculty at two-year institutions were tenured or eligible in both 1993 and 2004. Part-timers are almost never eligible for tenure; only 1% reported being eligible (or tenured) in 1993, while 6% were in 2004. Only about half (52% in 2004, down from 65% in 1993) of the full time accounting faculty at two-year institutions were tenured or eligible in the most recent survey. That compares to about 83% of full-time accounting faculty at four-year institutions in both 1993 and 2004 surveys. Tables 18 and 19 report the distribution of tenure among part-time and full-time accounting faculty (respectively) in two-year institutions.

Work Patterns and Work Product

Faculty in two-year institutions report that teaching (as compared with research) is their principal function. As would be expected based on their institutions' missions, Figure 7 shows that accounting faculty at two-year institutions report spending more of their time on instruction and (in the aggregate) less time on research than do accounting faculty at four-year institutions.

About 35% of all student credit hours generated in accounting (nationally) are generated at two-year institutions. Full-time faculty, who constitute only one-third of the two-year accounting faculty work-force, generated 56% of that total in 1993 and 64% in 2004. (Figure 8).

TABLE 18
Percentage of Part-Time Accounting Faculty in Two-Year Institutions
with Indicated Tenure Status, 1993–2004

	<u>1993</u>	<u>2004</u>
Tenured or eligible	1.2%	6.2%
Not eligible	98.8%	93.8%

TABLE 19
Percentage of Full-Time Accounting Faculty in Two-Year Institutions
with Indicated Tenure Status, 1993–2004

	<u>1993</u>	<u>2004</u>
Tenured or eligible	65.1%	51.6%
Not eligible	34.9%	48.4%

FIGURE 7
Percent of Time Spent on Instruction and Research, Accounting Faculty
by Type of Institution, 2004

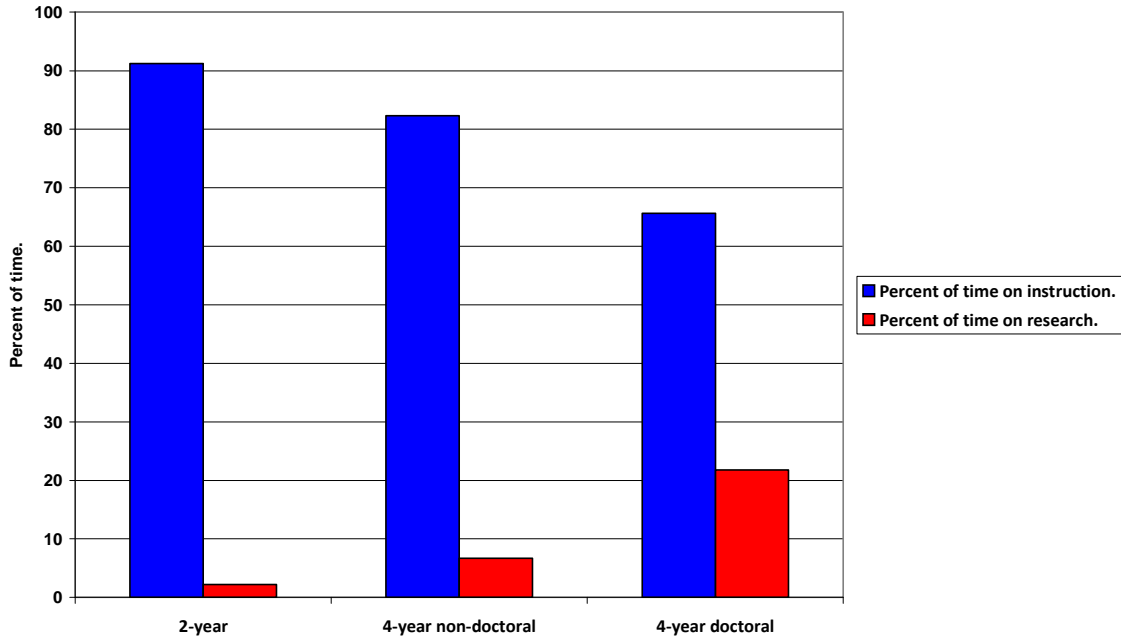
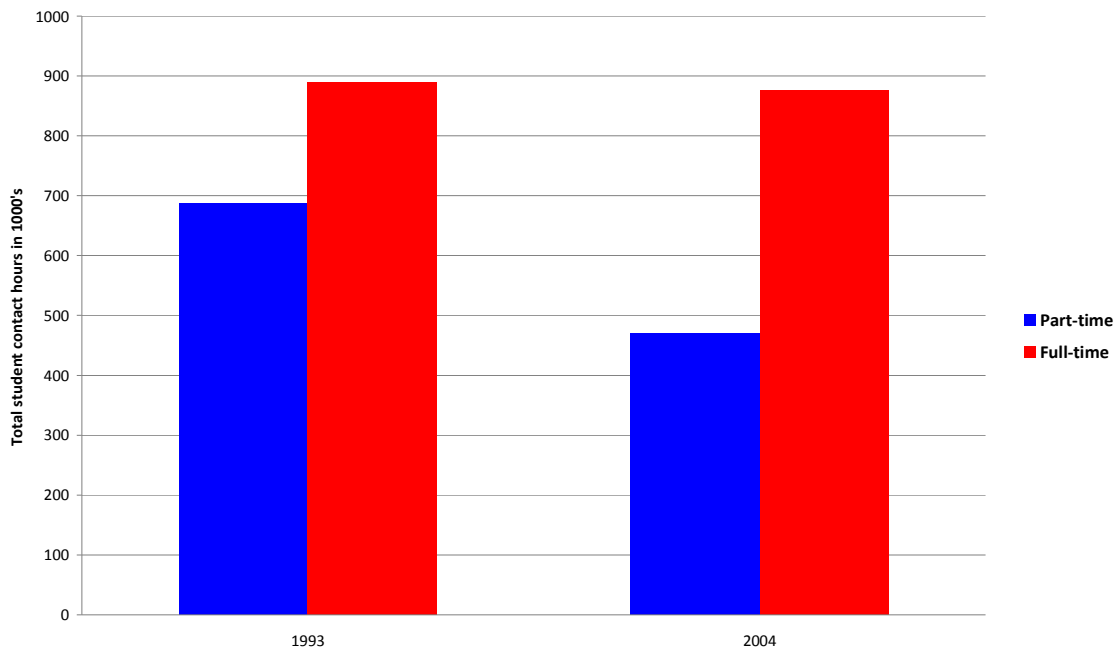


FIGURE 8
Total Student Contact Hours (in 1000s) Taught by Community College Accounting Faculty
by Full- or Part-Time Status, 1993–2004



Full-time accounting faculty in two-year institutions teach much heavier class schedules than do their counterparts at four-year doctoral institutions, roughly twice as many classes per semester on average (5.2 versus 2.5). Table 20 shows the relative class loads (number of classes taught) for part- and full-time faculty at two-year institutions in 1993 and 2004 respectively. Note the increase in average load for full-timers and the decrease in class size for both part-time and full-time.¹⁵ (Class size averages are under 20 at two-year institutions and about 30 at four-year institutions. These estimates do not take into account that introductory classes at four-year institutions may number in dozens or even hundreds, meaning that students in two-year institutions are far more likely to receive closer individual attention in smaller classes as they begin to study accounting—or any other discipline.)

Teaching loads (number of classes taught) by accounting faculty varied considerably among doctoral, four-year non-doctoral, and two-year institutions over the period 1993–2004. Figures 9 and 10 illustrate these trends. Both figures show that teaching loads increased for faculty (full- and part-time) at two-year institutions, while decreasing for faculty at doctoral institutions.

About 11% of all the student credit hours produced by accounting faculty at two-year institutions in both 1993 and 2004 were generated by faculty with doctorates or “first professional” degrees. That compares with 50% and 61% respectively of the student credit hours generated in four-year institutions by faculty with doctorates or “first professional” degrees. More student credit hours were generated (at both two- and four-year institutions) in 2004 than in 1993 by faculty whose highest degrees were in accounting (Figure 11).

On the average, two-year accounting faculty report spending about 2% of their time on research, a proportion that did not change materially between 1993 and 2004. Full-time faculty reported spending almost three times as much time on research as part-timers in 1993, but the gap had narrowed by 2004. Not surprisingly based on the teaching missions of two-year institutions, community college faculty spend much less time on research than faculty at four-year institutions where accounting faculty reported spending about 12% of their time on research in 2004 (accounting faculty at doctoral-granting universities reported spending 28% of their time on research.) Although NSOPF data do not specify the content of research, it may be that two-year faculty focus more of their research on issues related to teaching and learning than on more theoretically oriented disciplinary topics. Table 21 shows the percentage of time spent on research for both part- and full-time accounting faculty at two-year institutions.

TABLE 20
Mean Number of Classes Taught by Full- and Part-Time Accounting Faculty
at Two-Year Institutions, 1993–2004

	1993	2004
Part-time	1.41	1.56
Full-time	4.40	5.20

¹⁵ This table shows a rough estimate of class size for (respectively) part- and full-time accounting faculty at two-year institutions in 1993 and 2004:

Estimated class size	1993	2004
Part-time	24.3	17.4
Full-time	22.9	20.4

FIGURE 9
Mean Number of Classes Taught by Full-Time Accounting Faculty by Type of Institution, 1993-2004

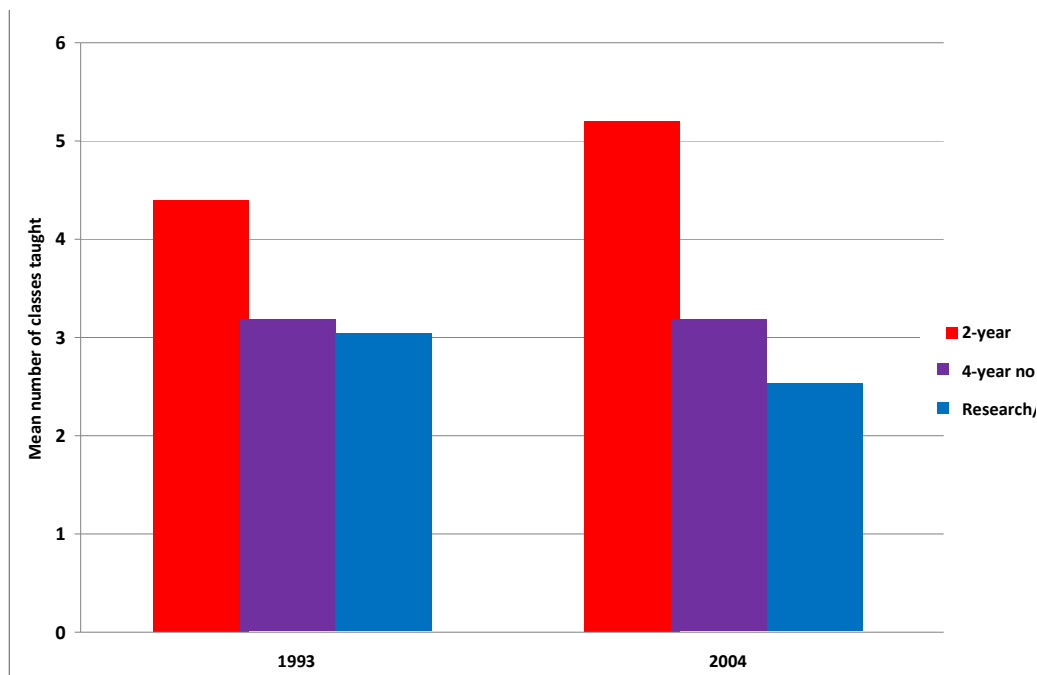


FIGURE 10
Mean Number of Classes Taught by Part-Time Accounting Faculty by Type of Institution, 1993-2004

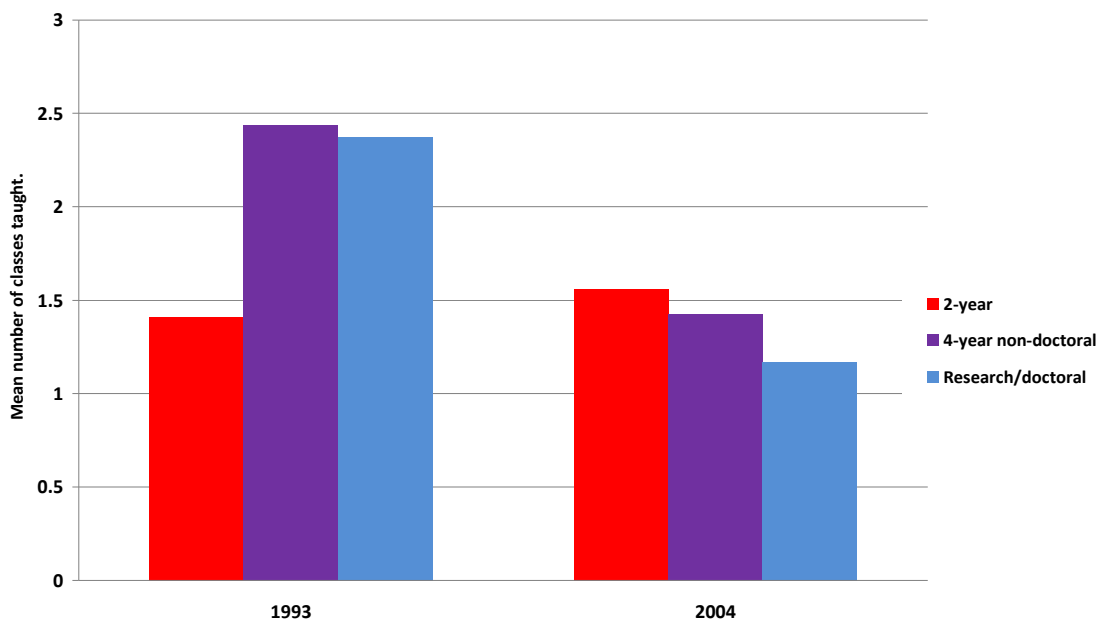


FIGURE 11

Proportion of All Student Credit Hours in Accounting Produced by Faculty Whose Highest Degree Is in Accounting, 1993–2004

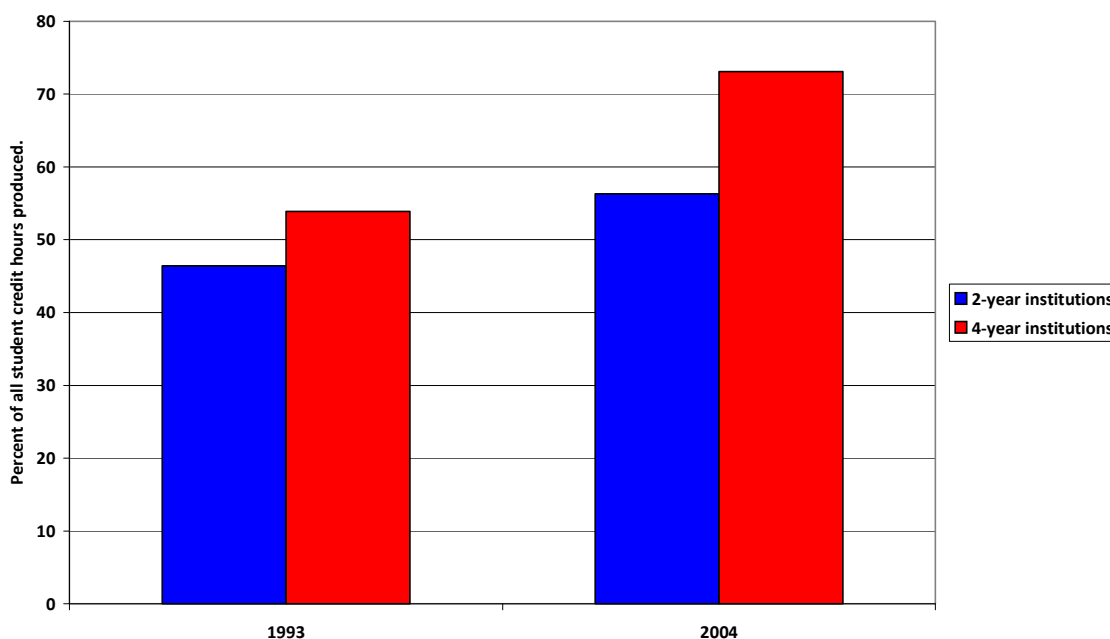


TABLE 21

Percent of Time Spent on Research Activities, Accounting Faculty in Two-Year Institutions, 1993–2004

	1993	2004
Part-time	1.1%	2.1%
Full-time	3.4%	2.5%

Patterns of Instruction

The NSOPF survey data provide some insight into characteristic patterns of instruction. Table 22 shows that accounting faculty at two-year institutions appear less inclined than their four-year counterparts to employ some of the more intensive instructional methods listed.

Part-time accounting faculty at two-year institutions appear less likely than full-timers to rely on the more intensive instructional strategies (Table 23). While NSOPF data only indirectly bear on the point, a crude index¹⁶ comparing the amount of time accounting faculty spend (altogether) on individualized instruction and advising suggests that the large number of part-timers may impede the kind of personal attention most needed by students at two-year institutions. The index of time on individualized instruction and advising is .45 for doctoral institutions (where faculty spend the most time on research), 1.93 for four-year non-doctoral institutions, and 1.22 for two-year institutions. (On the other hand, as noted earlier, on average class sizes are smaller at two-year institutions than at four-year institutions.)

¹⁶ Mean number of hours per week reported on individualized instruction plus advising times total number of faculty divided by mean number of students.

At the same time, community colleges generally recognize the need for attention to the learning needs of their students. “Academic support centers” are common at two-year campuses, and provide an array of resources and staff to work with students, often on an individual basis. The National Center for Developmental Education at Appalachian State University conducts research and development programs that support such centers and their staff.¹⁷ Two-year institutions offer their courses in many different formats from traditional face-to-face classes to on-line, tutorial, learning-lab, televised, off-hours, and hybrid delivery methods.¹⁸

In terms of content, two-year institutions generally construct their courses and curricula to meet the requirements of articulation with baccalaureate degree programs. In many states, such articulation is required by law.¹⁹

Job Satisfaction. Accounting faculty at two-year institutions appear satisfied with their jobs. Table 24 shows that over 90% (93% in 2004) reported being “very” or “somewhat” satisfied with their jobs overall. Satisfaction may have improved slightly between 1993 and 2004, although the changes are clearly within the surveys’ margins of error.

Part-time accounting faculty at two-year institutions are somewhat less likely (on average) to be “very” satisfied than are part-timers at doctoral and four-year non-doctoral institutions (Figure 12), but are more likely to be “somewhat” – or conditionally – satisfied.

Full-time accounting faculty at two-year institutions are more likely to be “very” satisfied than are full-timers at doctoral and four-year non-doctoral institutions (Figure 13).

Future Plans. Figure 14 shows that accounting faculty in two-year institutions were relatively less likely to retire in the short-term (1–5 years) and more likely to remain on the job for 20 years

TABLE 22
Percentage of Accounting Faculty Indicating Use of Method, 2004

	Undergrad Class, Group Projects	Undergrad Class, Service Learn/Co-Op Interactions with Business	Undergrad Class, Multiple Drafts of Written Work	Undergrad Class, Essay Midterm/ Final Exams	Undergrad Class Multiple Choice Midterm/ Final Exams
Two-year	48.2%	14.2%	8.5%	30.6%	89.0%
Four-year	56.7%	18.0%	28.6%	50.5%	76.3%

TABLE 23
Percentage of Part- and Full-Time Accounting Faculty at Two-Year Institutions
Indicating Use of Method, 2004

	Group Projects	Service Learning/Co-Op Interactions with Business	Multiple Drafts of Written Work	Essay Midterm/ Final Exams	Multiple Choice Midterm/ Final Exams
Part-time	43.3%	3.7%	6.2%	26%	93.7%
Full-time	57.0%	32.7%	12.7%	38.6%	80.6%

¹⁷ <http://www.ncde.appstate.edu/resources/reports/>.

¹⁸ Florida’s community college system offers faculty a “certificate in hybrid/blended course delivery. See http://www.fccj.edu/campuses/mccs/instruction/profdev/hbcp/hbcp_info07.pdf.

¹⁹ http://www.aacrao.org/pro_development/transfer.cfm.

FIGURE 12
Job Satisfaction of Part-Time Accounting Faculty by Type of Institution, 2004

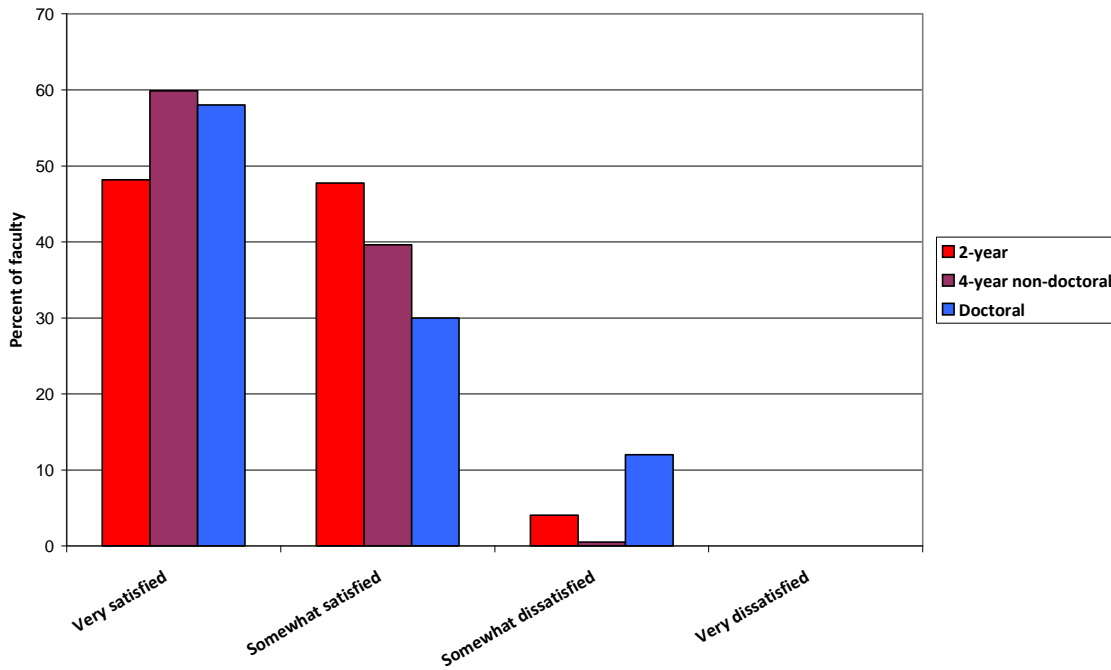
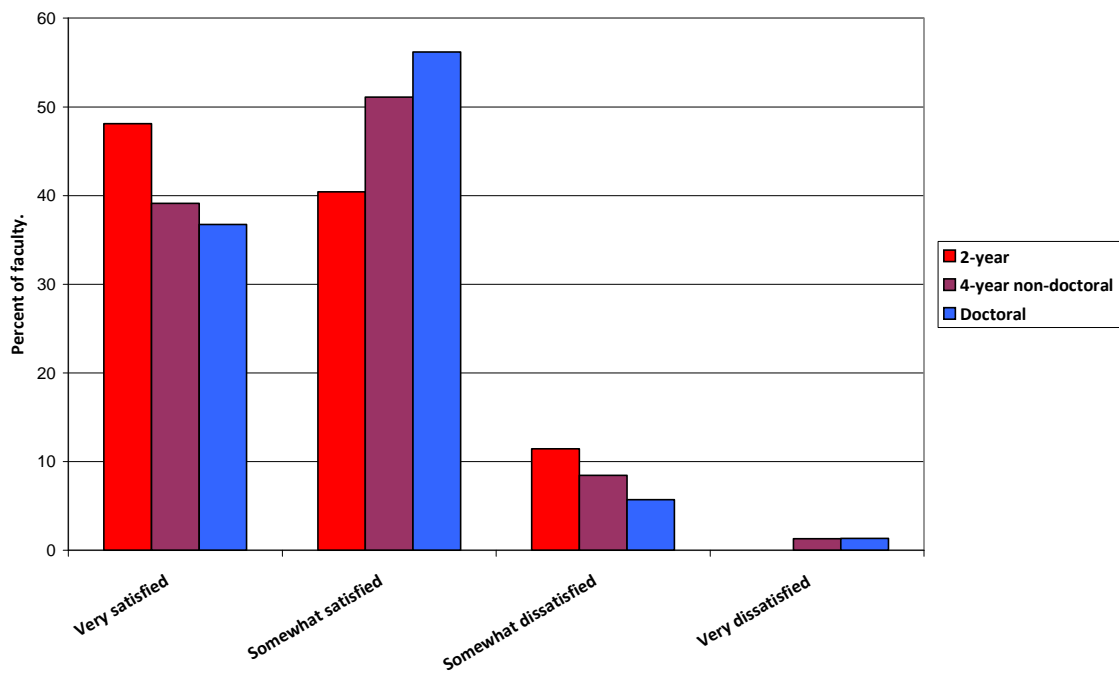


FIGURE 13
Job Satisfaction of Full-Time Accounting Faculty by Type of Institution, 2004



or more in 2004 than in 1993. The pattern is almost identical to that for accounting faculty at four-year institutions (Figure 15), indicating that – considering all faculty now teaching accounting – about one-sixth will need to be replaced in the short term.

Accounting faculty at two-year institutions appear highly satisfied with their choice of an academic career (as do faculty at four-year institutions in virtually equal proportions). Table 25 shows that roughly 90% or more of accounting faculty at two-year institutions express satisfaction with their choice of a teaching career. This pattern is consistent with their responses on an item in the 1993 survey that asked how likely they were to accept a position outside academe in the next three years. Only 12% of part-timers and 10% of full-timers responded “very likely.” (About 10% of full-timers and 7% of part-timers in accounting at four-year institutions responded in the same way.)

TABLE 24
Job Satisfaction of Accounting Faculty at Two-Year Institutions, 1993–2004.

	<u>Very Satisfied</u>	<u>Somewhat Satisfied</u>	<u>Somewhat Dissatisfied</u>	<u>Very Dissatisfied</u>
1993	47.5%	43.0%	8.6%	0.9%
2004	48.2%	45.3%	6.6%	0.0%

TABLE 25
Percentage of Accounting Faculty at Two-Year Institutions Who Would Choose an Academic Career Again, 1993–2004

	<u>1993</u>	<u>2004</u>
Part-time	85.0%	96.9%
Full-time	95.2%	88.1%

FIGURE 14
Projected Years to Retirement, Accounting Faculty at Two-Year Institutions, 1993–2004

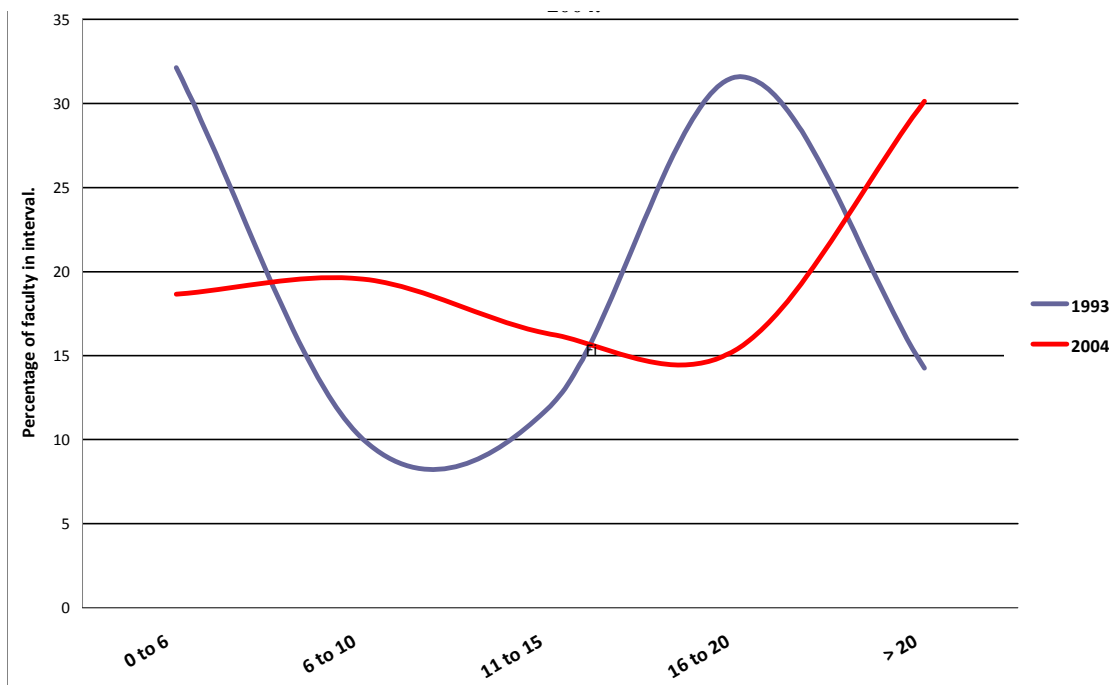
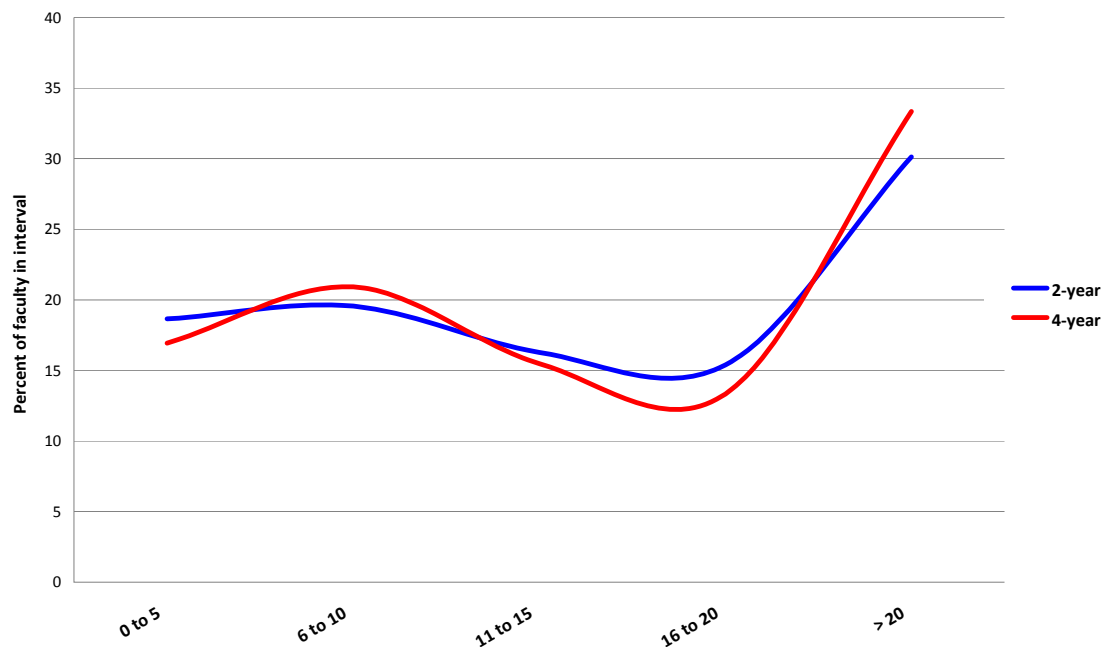


FIGURE 15
Projected Years to Retirement, Accounting Faculty
at Two-Year and Four-Year Institutions, 2004



Key Differences among Two-Year versus Four-Year Faculty and Students

Faculty and students at two-year institutions differ from those at four-year institutions. Accounting faculty at two-year institutions are largely part-time, are less likely to have terminal degrees or their highest degree in accounting, are more likely to teach smaller classes and spend more time on instruction, are less likely to engage in research, are more likely to be female, and are more likely to be employed elsewhere than are faculty at four-year institutions. Students at these institutions share some of these same characteristics, as the following section will show. They are predominantly part-time, more likely to be employed than students at four-year institutions, have less preparation for collegiate study, and are more motivated by their need for occupational preparation.

These differences highlight the need to understand more fully how teaching and learning of accounting vary among types of institution, and, in particular, how those who ultimately transfer from two-year programs to upper division classes at four-year institutions are prepared.

III. CHARACTERISTICS OF ACCOUNTING STUDENTS AT TWO-YEAR COLLEGES²⁰

Two-year institutions educate a far more diverse student population than do traditional four-year institutions, diverse in characteristics such as gender and age, academic preparation, life experience, motives, and educational/occupational/career trajectories. Roughly 40% of all students who report concentrating in accounting enroll at two-year institutions. Although it is not possible to determine for how long or with how much credit from datasets used for this report, 45% of baccalaureate-level accounting students reported (2008) “ever having attended a community college” at some point. About 19% of all baccalaureate-level accounting majors had earned at least some transfer credits (not necessarily in accounting) from an associate-degree-granting institution in 2008. Overall, then, two-year institutions are involved in educating a large proportion of college students who study accounting.

Motives to Enroll. Although about 40% of accounting students at two-year institutions indicate that they plan to transfer – presumably to a four-year institution for a baccalaureate degree – more indicate their prime motive is to pursue occupational or job skills (Table 26). About 23% indicate they have a personal interest in the subject.

Gender. The majority of all accounting students are female (Table 27). Accounting students at two-year institutions are far more likely to be female than male, and far more likely to be female than accounting students in four-year institutions.

Race/Ethnicity. While accounting students are predominantly white (Figure 16), the proportion from minority groups has increased over the past two decades (Table 28).

TABLE 26
Principal Motives (more than one possible) for Enrolling
in Two-Year Accounting Major, 2008

	Gain Occupational or Job Skills	Prepare to Transfer	Personal Interest
Percent reporting motive	59.4%	40.1%	23.1%

TABLE 27
Gender of Accounting Majors (percent female)
by Type of Institution, 1990–2008

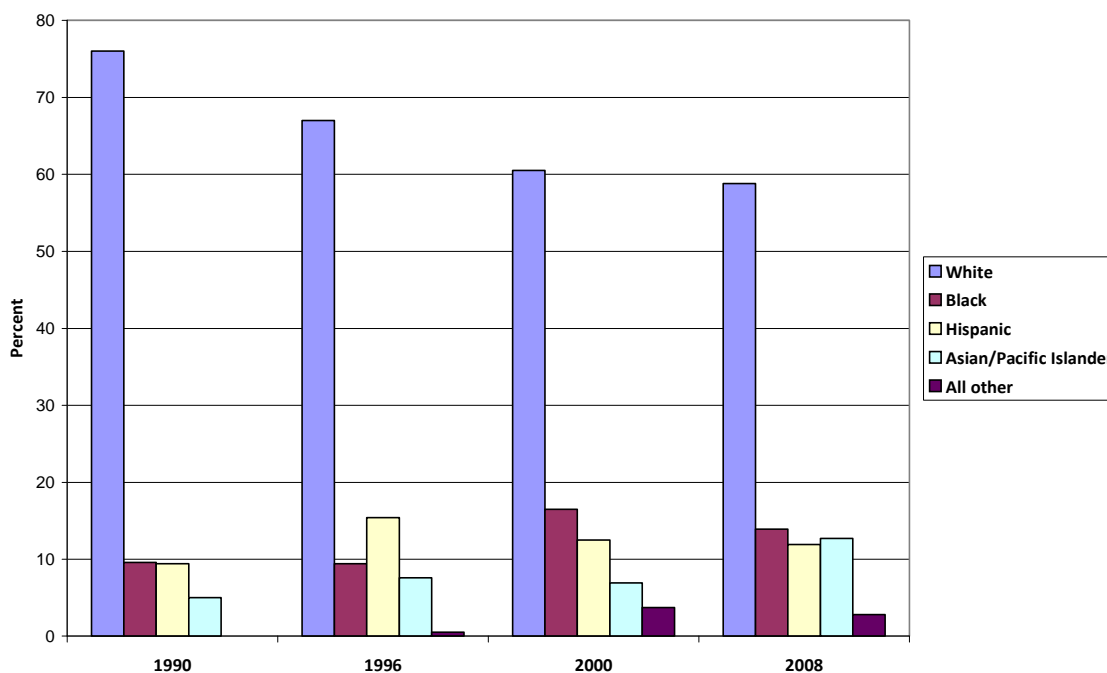
	1990	1996	2000	2008
Two-year	68.5%	67.4%	77.8%	70.0%
Four-year non-doctoral	56.9%	64.6%	63.1%	56.8%
Four-year doctoral	52.6%	58.8%	51.4%	58.9%

²⁰ Data from the 1993 survey have been omitted; see Appendix A.

TABLE 28
Ethnicity of Accounting Students at Two-Year Institutions, 1990–2008

	<u>White</u>	<u>Black</u>	<u>Hispanic</u>	<u>Asian/ Pacific Islander</u>	<u>All Other</u>
1990	76.0%	9.6%	9.4%	5.0%	0%
2008	58.8%	13.9%	11.9%	12.7%	2.7%

FIGURE 16
Percent of Two-Year Accounting Students by Race/Ethnicity, 1990–2008



Age. On the whole, two-year institutions' student populations show a broader age distribution than do those at four-year colleges and universities. Typically, they enroll a mix of traditionally aged students and older adults who are often returning to school for personal and professional reasons. In fact, as the data in Figure 17 show, 52% of the accounting students at two-year institutions were 27 or older in the 2008 survey. Figure 17a shows the age distribution of accounting majors by type of institution for 2008. Only 25% of accounting undergraduates at research and doctoral institutions were 27 or older.

Full- or Part-Time. About one-third (35%) of accounting students at two-year institutions attended full-time (2008). By contrast 73% at four-year non-doctoral institutions and 79% at four-year doctoral institutions attended full-time. The large majority of older (than 26) students were part-time, while half of younger (than 26) students were full-time (Figure 18).

Work Status. About three quarters (76%) of all accounting students at two-year institutions worked at least part-time while in school in 2008. Half of those employed, 38%, worked full-time. This is a far higher proportion of students working full-time than was the case with either

FIGURE 17
Age Distribution of Accounting Majors at Two-Year Institutions, 1990–2008

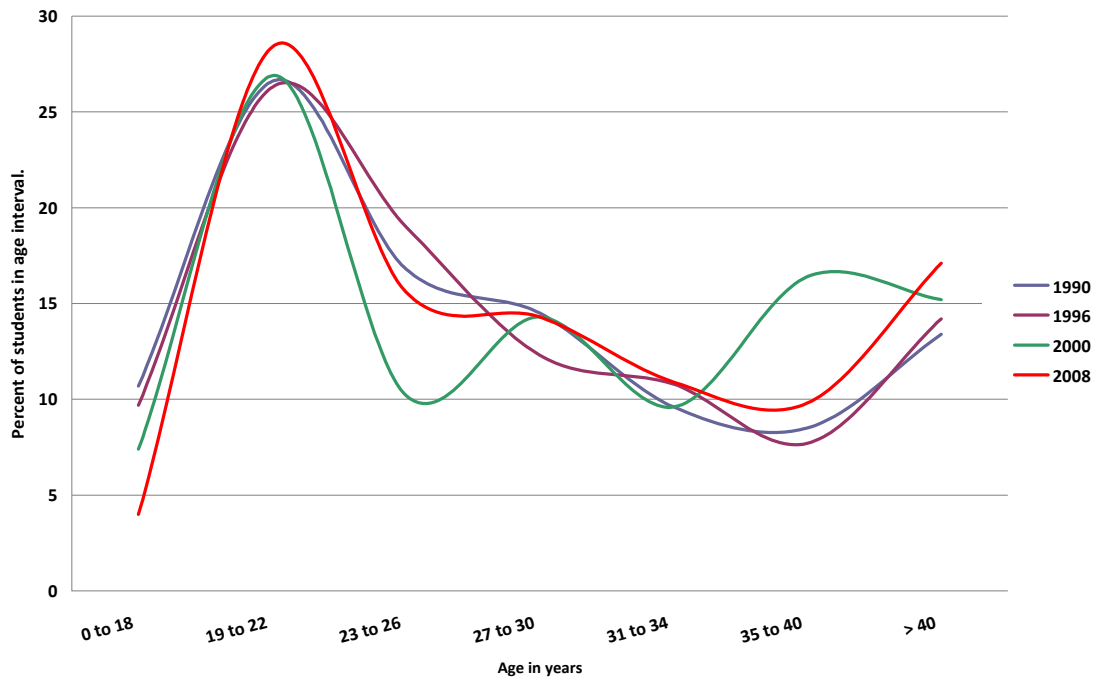
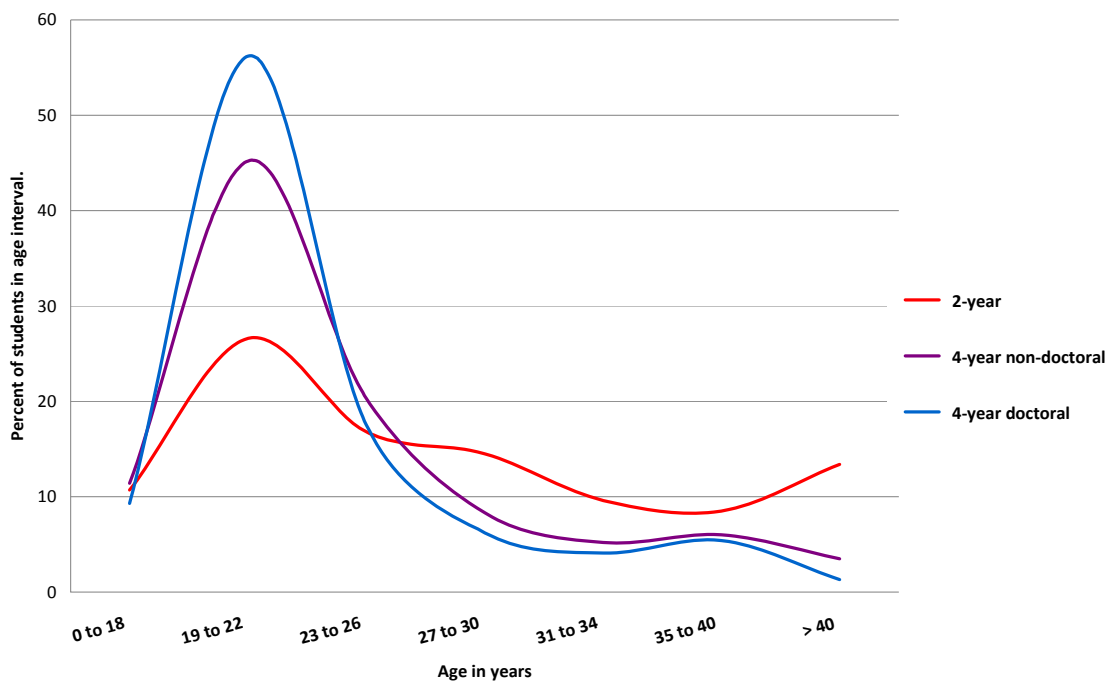


FIGURE 17A
Age Distribution of Accounting Majors by Type of Institution, 2008



four-year or research/doctoral universities (Figure 19). But it is also lower than the 59% who reported working full-time in the 2000 survey.

FIGURE 18
Full- or Part-Time Status of Accounting Students at Two-Year Institutions by Age 2008

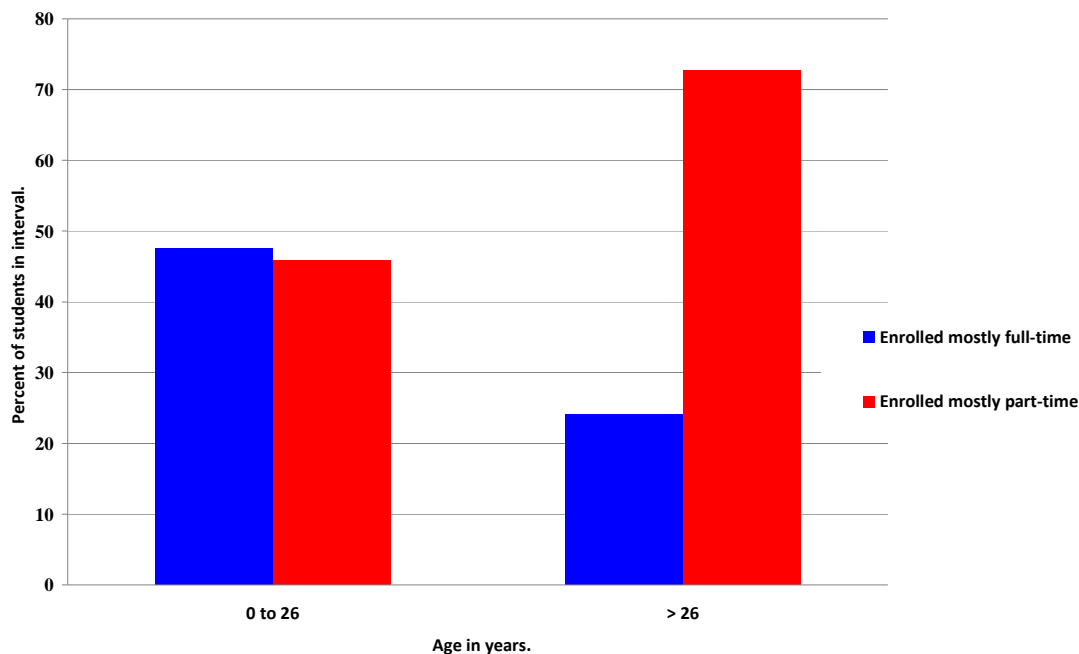
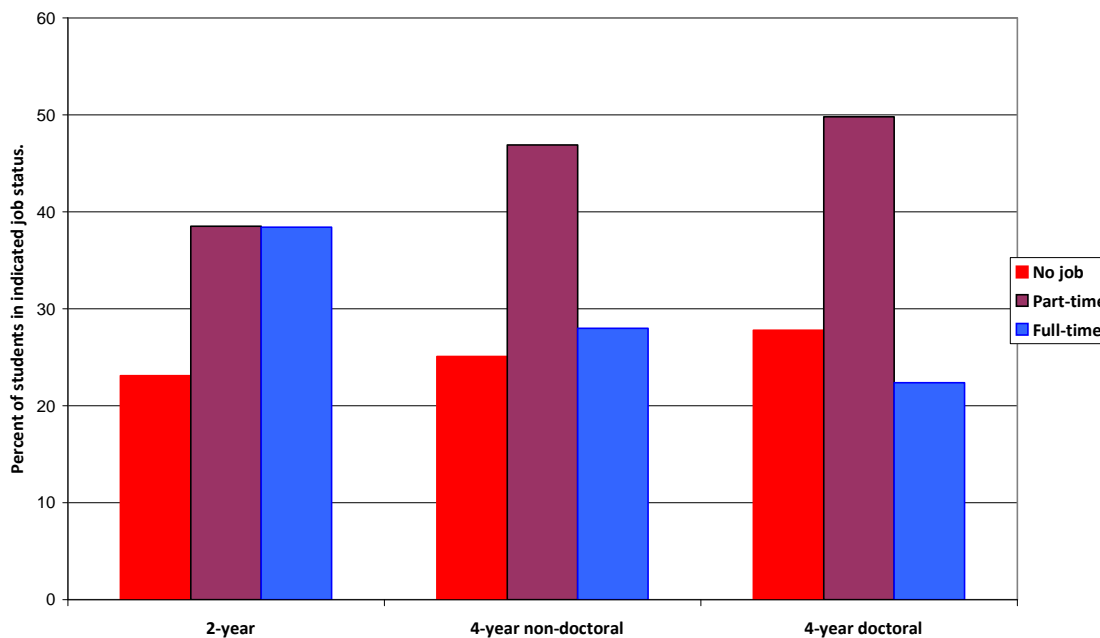


FIGURE 19
Work Status of Accounting Students while Enrolled by Type of Institution, 2008

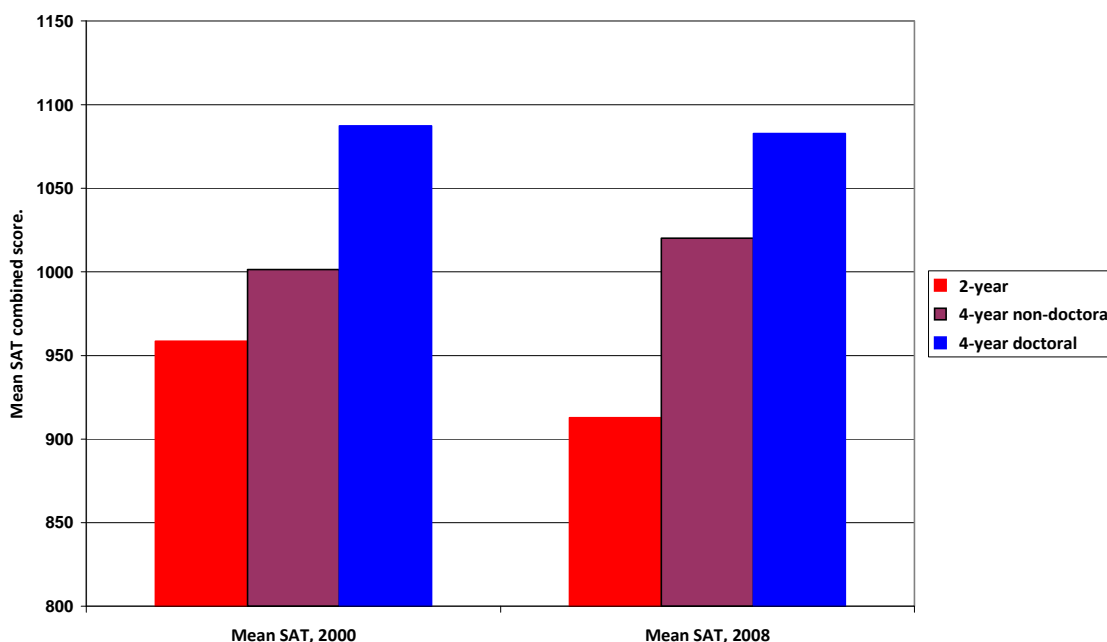


Academic Ability and Preparation for College. Accounting students at two-year institutions, as a group, perform at lower levels on standardized admission tests than those entering four-year institutions. Figure 20 compares the mean combined SAT scores of accounting students by type of institution for survey years 2000 and 2008.

Risk Factors. The National Postsecondary Student Aid Survey identified “risk” factors that are known to impede students’ persistence and success in college.²¹ Figure 21 shows the cumulative number of risk factors characteristic of accounting students at each of three types of institution. Those attending two-year institutions are far more likely to have multiple risk factors than students at other types of institution. (About 42% had four or more risk factors according to the 2008 survey.)

Parents’ Education Level. Parents’ education level is also considered a risk factor, as first-generation college students tend to leave college before finishing at a faster rate than those whose

FIGURE 20
Mean SAT Combined Score for Accounting Majors by Type of Institution, 2000–2008



²¹ NCES defines risk factors as:

- a. Delayed enrollment beyond traditional age
- b. No high school diploma
- c. Part-time enrollment
- d. Financially independent
- e. Have dependents
- f. Single parent status
- g. Working full-time while enrolled

parents have at least some college.²² Accounting students at two-year institutions are far more likely to be first-generation than those at four-year institutions (Table 29).

High School Grades. In a pattern similar to all other college majors, as a group accounting students at two-year institutions typically reported earning lower grades in high school than did students at four-year institutions. Figure 22 shows that only a quarter (23.7%) of two-year accounting students reported having an “A” average in high school, while over 52% of students at four-year doctoral granting universities reported having “A” averages. More two-year accounting students (32.9%) reported high school averages in the “C” to “B” range.

Highest Level of Math in High School. Accounting students at two-year institutions reported being less likely than those at four-year institutions to have taken higher level math in high school. Figure 23 shows the distribution of highest math taken by type of institution.

FIGURE 21
**Cumulative Number of Risk Factors Reported by Accounting Students
by Type of Institution, 2008**

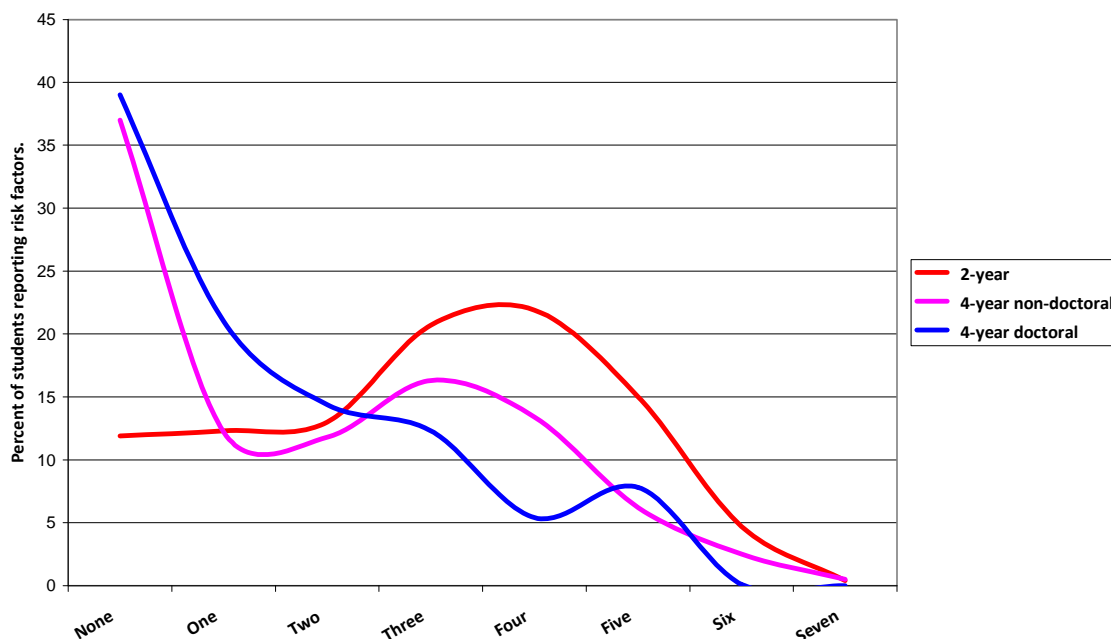


TABLE 29
Parents' Highest Education Level (Accounting Students, 2008).

	No College	Some College, No Degree	BA or Higher Degree
Two-year	53.4%	18.8%	27.8%
Four-year non-doctoral	38.8%	22.9%	38.4%
Four-year doctoral	35.7%	16.2%	48.1%

²² Choy, S. P. *Students Whose Parents Did Not Go To College: Postsecondary Access, Persistence, and Attainment* (NCES 2001-126). Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2001. <http://nces.ed.gov/pubsub/2001/2001126.pdf>.

FIGURE 22
High School Grade-Point-Average for Accounting Students by Type of Institution, 2008

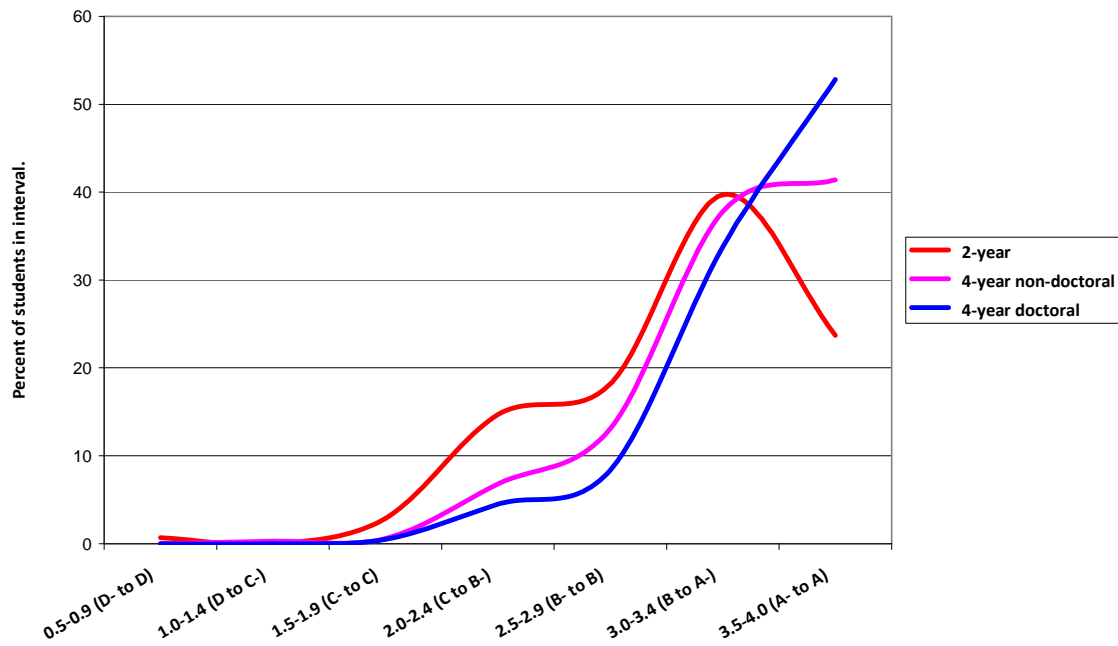
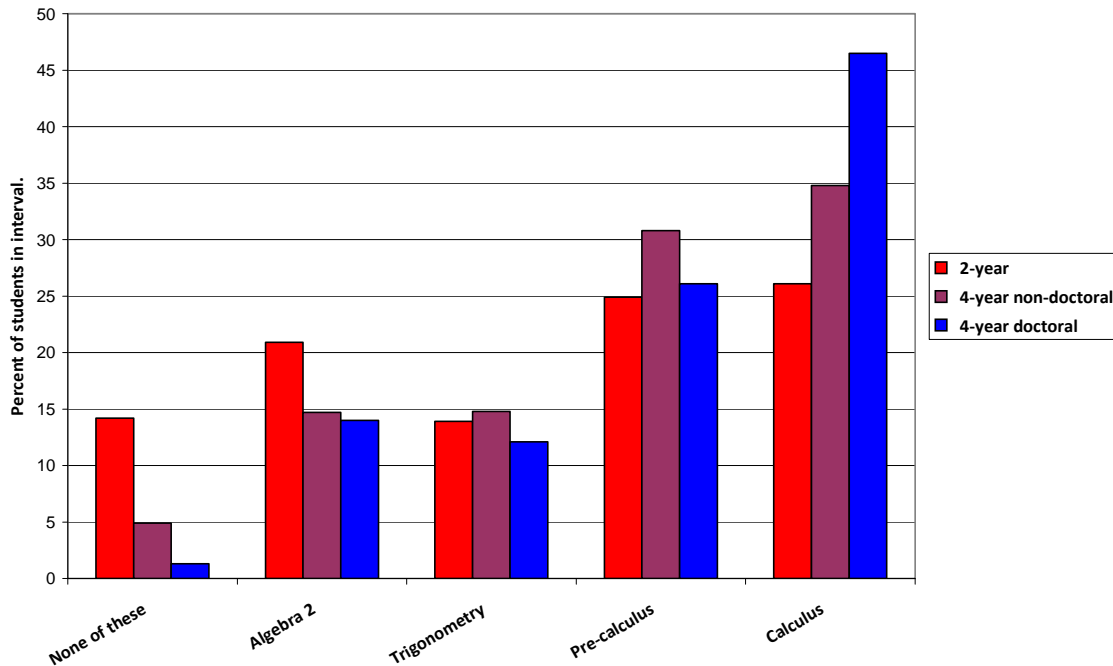


FIGURE 23
Highest Level of Math Taken in High School by Accounting Students, 2008



SUMMARY AND CONCLUSIONS

Two-year institutions provide access to higher education for a broad range of the population, and differ substantially from four-year institutions in many ways. They are principally teaching institutions with multiple missions, employ a high proportion of part-time and non-tenure-eligible faculty, and educate a more adult, part-time, and employed population than do four-year institutions. Their faculty are more likely to teach smaller classes, spend more time on instruction, and be employed outside of their teaching positions, they are also less likely to hold terminal degrees or their highest degree in accounting.

Students and faculty in accounting at two-year institutions are similar to the larger population of students and faculty at two-year institutions. Given that 16.4% of all accounting majors at four-year institutions report having earned an associate's degree, 40.1% of accounting majors at two-year institutions indicate plans to transfer to a four-year institution, and about 45% of all accounting majors at four-year institutions report having attended a two-year school at some point, it is important to learn more about how the impact of their backgrounds and experiences during the first two years of college may affect how they adapt to four-year institutions in their upper division years.

About 70% of accounting faculty in two-year colleges hold a master's degree (just over 11% hold a Ph.D. or first professional degree). Only about 50% of those teaching accounting at two-year institutions hold their highest degree in the discipline of accounting. They are far more likely to be otherwise employed than their counterparts in four-year institutions. Two-year faculty teach smaller classes with heavier course loads; full-time two-year faculty held teaching loads averaging about five classes per semester in 2004.

The large majority of accounting faculty at two-year institutions is part-time. They are a relatively stable workforce, having spent an average of seven years in their current teaching positions. At the same time, they are also far more likely than accounting faculty at four-year institutions to have two years or less of experience in their teaching positions.

Both students and faculty in accounting at two-year institutions are increasingly female. Over 77% of two-year accounting students were female in 2004, and 59% of the full-time faculty were female. Students are becoming more ethnically diverse than faculty. While faculty remain consistently about 85% White, by 2008 accounting students at two-year institutions were only 58% White.

Faculty in community colleges face a particularly varied and thus challenging student body. Highly diverse in their backgrounds, preparation, and reasons for enrolling, more students at two-year institutions indicate that their reasons for studying accounting are occupational rather than to achieve a four-year degree. Students at two-year institutions generally bring with them more challenging backgrounds, bringing higher risks of drop-out or failure to graduate. Because two-year students present a less traditionally "academic" profile than might be characteristic of students at four-year institutions, instruction at two-year schools may be more heavily oriented to the practical and clinical side of the field. Community colleges are also more student- and developmentally centered than might be the case in a larger, more research-oriented university setting.

In two-year institutions few faculty pursue disciplinary research (although more may explore ways to improve teaching and learning) and many are employed outside their teaching

positions. Upper division accounting programs may find that some of their transfer students differ from their traditional students, both in their part-time/full-time approach to their academic work and in their current work experience. The practical orientation of faculty at two-year institutions likely differs from the more theoretical and research-driven orientation of faculty at four-year institutions, which may increase the likelihood of “transfer shock” experienced by those who start their collegiate study at two-year institutions.

Principal characteristics that differentiate two-year accounting faculty and students from those at four-year institutions are the proportion engaged in either teaching or learning on a part-time basis, and the proportions who are either partially or fully employed elsewhere. Most two-year faculty do not have terminal degrees nor their highest degree in accounting, and teach a substantially at-risk student population with multiple reasons for attending school. These differences highlight the need to understand more fully how teaching and learning of accounting varies among types of institutions, and in particular, how those who ultimately transfer from two-year programs to upper division classes at four-year institutions are prepared. Because about 45% of all students in accounting attend two-year institutions at some point, what they learn and how they learn it may ultimately affect both the practice and broader understanding of the field’s concepts and principles in business, government, and the profession itself.

APPENDIX A

The Data Analysis System provided on-line by the National Center for Education Statistics allows for access to both NSOPF and NPSAS survey data. This system allows construction of tables and other kinds of analyses, but does not provide access to raw data. Accordingly, any analysis depends on how NCES archives data and weights its raw data to facilitate estimation of parameters.

Data from the 1993 NPSAS survey, analyzed using NCES' on-line Data Analysis System, generates total enrollment estimates that depart substantially from enrollment estimates available elsewhere in NCES data, specifically the Education Digest data file. Figures A and B illustrate enrollment trends with (A) and without (B) 1993 enrollment data. Because these differences are so great, both absolutely and proportionately, the 1993 NPSAS data have been excluded from analyses in this report.

Although my initial analysis indicated that the 2008 NPSAS estimates could be spuriously high, NCES staff report that "major field" was coded in a different way in 2008 using "CIP" codes, which could have resulted in over-inclusion. When NCES staff reanalyzed data on majors using Education Digest totals, their estimate of accounting enrollments for 2008 were very close to my estimates from NPSAS totals (Figure C).

In the end, it appears that the 1993 data should be excluded and that the 2008 NPSAS data are likely to be a defensible estimate of accounting enrollments.

FIGURE A
Enrollment Trends from *Education Digest* and NPSAS Converted to a Base of 1.0 (1990)

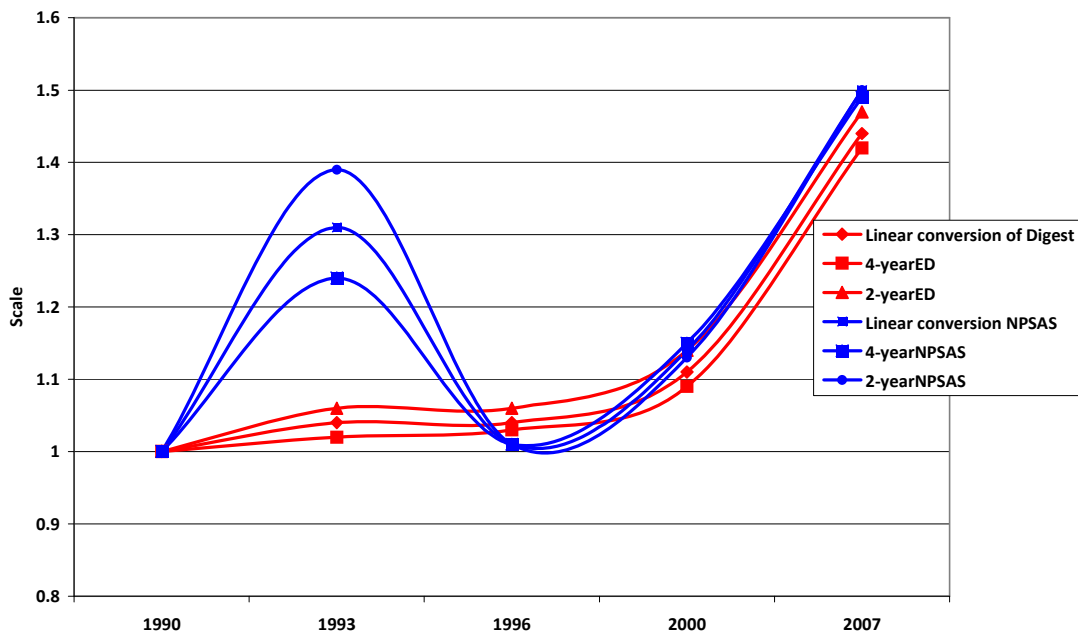


FIGURE B
Enrollment Data from *Education Digest* and NPSAS Converted to a Base of 1.0 (1990), Excluding 1993

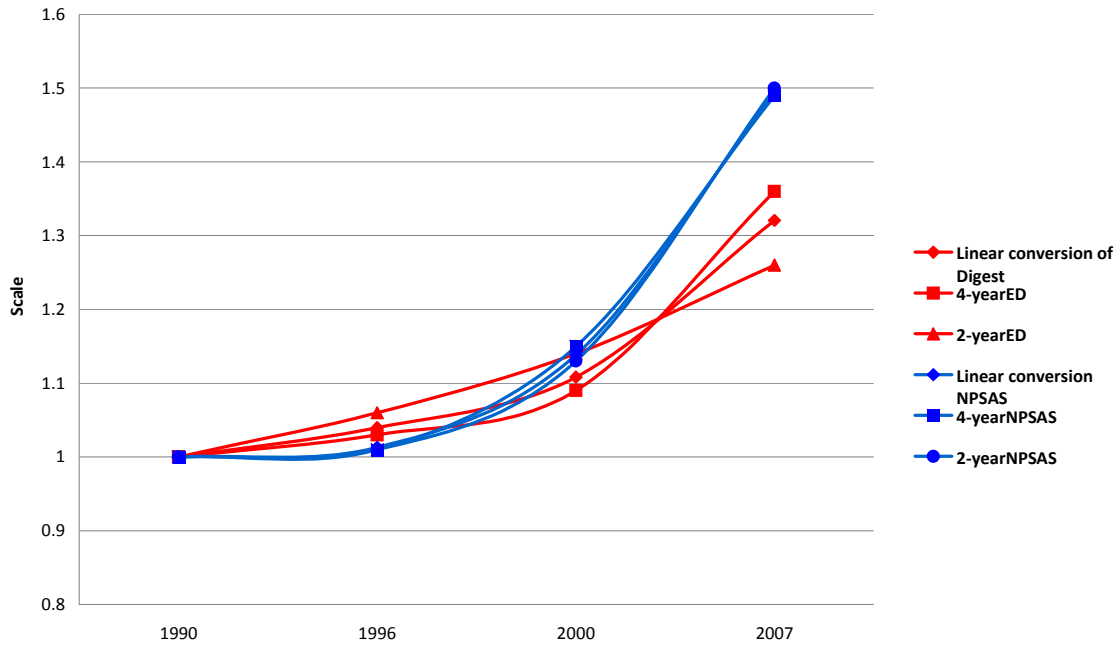
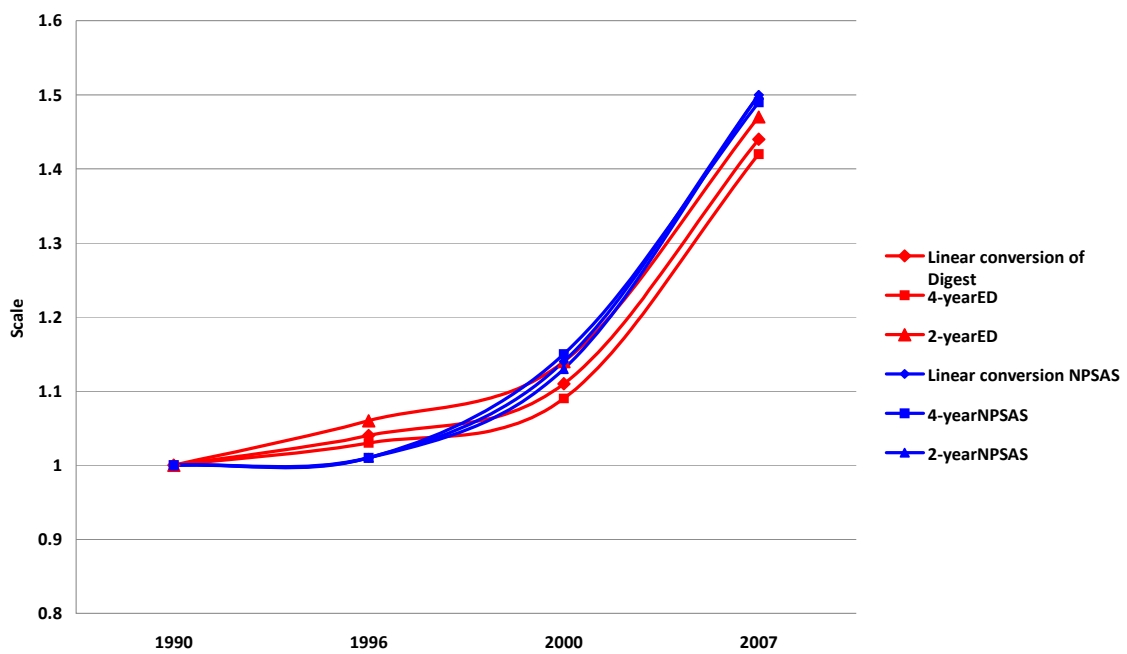


FIGURE C
Revised Estimate of Accounting Enrollment (excluding 1993) based on NCES Analysis of 2008 *Education Digest* data (transformed to base of 1.0)



This report is the last of a three-part series of studies on accounting faculty and students published by the American Accounting Association (AAA) with support from the American Institute of Certified Public Accountants (AICPA).

REFERENCES

- American Accounting Association (AAA, 2008). *Accounting Faculty in U.S. Colleges and Universities: Status and Trends, 1994–2004*. Prepared by David W. Leslie, College of William & Mary. Available online: <http://aaahq.org/temp/phd/accountingFacultyUSCollegesUniv.pdf>
- (AAA, 2009). *Trends in Non-Tenure-Eligible Accounting Faculty, 1993–2004*. Prepared by David W. Leslie, College of William & Mary. Available online: <http://aaahq.org/temp/phd/LeslieReport2.pdf>
- (AAA, 2010). *Accounting in Community Colleges: Who Teaches, Who Studies?* Prepared by David W. Leslie, College of William & Mary. Available online: <http://aaahq.org/temp/phd/LeslieReport3.pdf>

