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Accounting Educators:

Volume III, Number 1—September 1991

New Study of CPAs in Public Practice Completed

The 1991 practice analysis identifies the major tasks and activities that CPAs carry out in accounting and auditing (A&A), taxation, management advisory services (MAS), and personal financial planning (PFP) engagements, and describes the knowledge and skills CPAs need to perform A&A and taxation engagements. The results are based on information from panel discussions with specially selected CPAs, survey responses from almost 2,000 AICPA members in public practice, in-depth interviews with recently licensed CPAs, and diaries of CPAs' work activities. The 1991 practice analysis represents an up-to-date description of public accounting that supplements and extends the last practice analysis, completed in 1983.

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Recruiting Update

Marketing Plan Will Enhance Careers Materials, Services

The AICPA recently contracted Tom Yaegel & Associates of Richboro, Pennsylvania, to develop a plan for recruiting the "best and brightest" students into the accounting profession.

The marketing plan will be based on the results of a report, sent this summer to the Administrators of Accounting Programs Group, which surveys students' perceptions of, and

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PLANNING FOR THE FUTURE

by Philip B. Chenok, CPA

The author is president of the American Institute of Certified Public Accountants. Mr. Chenok wrote this article for the June 1991 issue of The Practicing CPA, an AICPA publication for local firms. (Copyright 1991 by the AICPA; used with permission.) The assumptions developed reflect a view of the future without consideration of actions the Institute might take to influence change. The article is presented here to stimulate reflection on directions accounting education might take in the face of developments in the profession.

Much as CPA firms must plan in order to meet the needs of their clients, so must the AICPA engage in a strategic planning process if it is to meet the future needs of its members. The end result of the Institute's planning efforts can be utilized by firms to help them work within the future environment.

Education Division Broadens Focus

In its report to the Board of Directors of the American Institute of Certified Public Accountants, the Special Committee on Governance and Structure recommended that the Relations with Educators Division broaden its programmatic focus to include all activities related to "developing highly qualified individuals, attracting them into the profession, and retaining them after they enter." Accordingly, at its July 1991 meeting, the Board directed that the Division be restructured as the **Academic and Career Development Division**.

The Education Executive Committee will become the Academic and Career Development Executive Committee, and the restructuring will include relocation of the Upward Mobility of Women Committee to the new Division.

Many changes are in progress; we'll keep you informed of developments. ■

The Institute has been involved in such an exercise for several years now. This is an ongoing process, directed principally to providing the Institute with a mechanism to anticipate rather than react to change. It enables the AICPA to develop a game plan to achieve its objectives and its overall mission. To develop this game plan, however, it is first necessary to develop some broad assumptions about the future. Many elements will affect CPAs in the years ahead. These include demographic changes in the population, changes in the national and world economies, changes in the structure of capital markets, and technological developments. Another important element will be changes in the types of activities with which members are involved.

The development of the Institute's strategic planning assumptions about the future is a challenging

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task. The Institute considers input from a variety of sources. The starting point is a review of the assumptions developed in earlier planning cycles. In addition, it includes the thinking of futurists, a host of economic and demographic data provided by government and others, and reports of relevant AICPA committees.

As mentioned previously, the assumptions resulting from this process are the first step in developing a plan to enable the AICPA to serve its members. I believe, however, that they can also form the basis of discussions that could help CPA firms prepare for the pitfalls and opportunities that will surface in the years ahead. Although there obviously would be some overlap, for convenience these assumptions have been grouped in the following major areas.

GLOBALIZATION

The forecast is for a tremendous increase in the amount of international trading and the development of several economic blocs. Eastern Europe and even the Soviet Union should continue moving toward free market economies, and the scope of international investments should grow substantially. In the future, even small businesses will operate in a global marketplace.

As a consequence of this trend, a growing number of CPA firms will have clients who are involved in international operations. This means that CPAs will have to expand their expertise to cover the international arena, and will need to be aware of issues and developments overseas that affect their clients. The globalization of capital markets will intensify the desire for harmonized accounting and auditing standards throughout the world. CPAs and their counterparts in other countries will increasingly demand reciprocity. All told, there will be dramatic changes in the way business is transacted, and a widespread expansion of trade beyond the borders of this country.

TECHNOLOGY

Today, information-based services account for a substantial portion of the U.S. economy. Constant development of computer, information, and communication technology has already had a significant impact on the operation of CPA firms. Much more information is readily accessible now than just a few years ago, and the capability to process it can be obtained at substantially reduced cost.

The next major development affecting CPA firms will be expert and artificial-intelligence computer systems that can be used to provide clients with timely, accurate solutions to many of their problems. The purchase and use of such systems will have a significant effect on capital and personnel requirements, as well as on the nature of work under-

taken by accountants. Many CPA firms will face increased need for capital to invest in these systems and in the training necessary for their use. As an alternative to heavy capital investment, some firms will likely choose to specialize and practice in narrow areas, depending on their size, and on the backgrounds, training, and inclinations of their personnel. Professional networking among firms will probably increase.

Technological changes also hold organizational and personnel implications. As the need expands for more experienced personnel and declines for lower-level staff members, we are seeing a move away from the pyramid-shaped organization, typical of most accounting firms. Moreover, the need for people with specialized technical skills will create greater opportunities for non-CPAs to become associated with accounting firms. In the future, a higher percentage of the total work force at CPA firms will be in long-term career positions. These developments mean that major changes in the education process will be necessary to adequately prepare accountants for entry into the profession.

Future technology will have an impact on all areas of a CPA's practice, and particularly on how, when, and where attest engagements are performed. Auditors will be able to test more extensively, apply analytical procedures more effectively,

and take advantage of expert systems. The new technology will also open up opportunities for you to provide training programs to your clients. But as the scope of services further expands beyond the accounting and auditing areas, so will competition intensify.

COMPETITION

The development of new services outside traditional areas is bringing CPA firms into competition with non-CPA organizations as well as with each other. Couple this with an already competitive environment for traditional services and it is apparent that CPA firm profitability will continue to be under pressure. As a consequence, one likely event is an acceleration in the trend toward firms charging for some services on a basis other than time expended.

Mergers of CPA firms will also continue unabated. (Associations between CPA firms and non-CPA firms providing overlapping services is another possibility.) Intense competition, like technological changes, will accelerate specialization and further the trend to diversity in the sizes and types of practice units. On the one hand, for example, firms will develop or acquire specialist groups for separate functions within their existing structures. On the other hand, there will be an increasing number of start-up, specialty, and niche firms as the market for CPA services continues

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*In the future, even small
businesses will operate in
a global marketplace.*

AICPA Awards Doctoral Fellowships

The AICPA recently awarded fellowships to 15 doctoral students selected from among 61 applicants.

The program is designed to encourage qualified persons to enter into and complete doctoral study in accounting and to become accounting educators. The AICPA Doctoral Fellowships Program, now in its seventh year, provides grants of \$5,000 each to students who show outstanding potential. The grants are renewable for an additional two years.

The 1991 AICPA Doctoral Fellows are:

- Jane Dillard Berry**, CPA; University of Alabama
- Scott J. Boylan**, CPA; Ohio State University
- Kenneth A. Coy**, CPA; Penn State University
- Mark C. Dawkins**, CPA; Florida State University
- Elizabeth M. Dreike**, CPA; Arizona State University
- Melanie A. Gifford**, CPA; University of Georgia
- Kim Gladden**, CPA; Oklahoma State University

- Jacqueline S. Hammersley**, CPA; Univ. of Illinois, Urbana-Champaign
- Suzanne L. Hawks**, CPA, University of Miami
- B. Charlene Henderson**, CPA; Arizona State University
- Daryl Deen Kemsley**, CPA; University of North Carolina
- Laura A. Pollard**, CPA; Indiana University
- Ronald A. Stunda**, CPA; Florida State University
- Michael Willenborg**, CPA; Pennsylvania State University
- Sherri L. Williams**, CPA; University of Pittsburgh

In addition, continued funding was provided for 27 students awarded grants in the past two years who requested such renewal.

Candidates for AICPA Doctoral Fellowships must possess the CPA certificate at the time of application. In addition, applicants are screened on the basis of past and present academic performance and professional accounting experience.

More information about the program and applications for next year's awards, which will be made in the Spring of 1992, may be obtained from the Academic and Career Development Division, AICPA, 1211 Avenue of the Americas, New York, NY 10036. ■

Careers (continued from front page)

interest in, the accounting profession. The study, conducted for the AICPA by the Gallup Organization, involved telephone interviews of high school and college students nationwide.

The ensuing report, *Accounting Recruiting Research: Survey of High School and College Students*, revealed a number of interesting observations by students about the accounting profession and how and when college and career decisions are made. Among these findings are:

- Nearly half of the high school students (42%) and about one in four of the college students said that they are either very or fairly interested in an accounting career; however, high achievers in high school expressed less interest than lower achievers.
- When asked to rate six professions (accounting, engineering, financial planning, law, medicine, and teaching) on a scale of 1 to 10, students rated accounting the lowest. The mean rating was slightly better than average (5.73 for high school; 5.97 for college).

Other findings in the study include: the majority of high school and college respondents said that they made their decision to go to college prior to high school; parents were cited as being very influential in the college/career decision-making process, while guidance counselors were found to be not as helpful; and a fifth year of college would not affect high school or college students' career choices. (This is significant given the current effort to implement the 150-hour education requirement.)

A first draft of the recruitment plan, which will comprise a profession-wide effort involving the Institute, state societies, CPA firms, and academe, is expected to be finished in time for exposure at the AICPA/State Society Accounting Careers Conference in Nashville, September 25 and 26. For more information, contact John Daidone at (212) 575-6357. ■

Look for a special **EDUCATION SECTION** in the October *JOURNAL OF ACCOUNTANCY*!

OCTOBER 1991
JOURNAL OF ACCOUNTANCY

**THE CPA PRACTITIONER'S
STAKE IN EDUCATION**

What can industry and accounting firms expect from the accounting educational process? This special section will cover the major issues from the view of the CPA practitioner: the 150-hour requirement, the latest analysis of practice, the restructured CPA exam, the transition to academia, the need for graduates with international savvy, recruiting, new AACSB accreditation standards, a profile of tomorrow's graduate, schools of accounting and ethics and the curriculum.

Gary Previts

Rick Elam

William Shenkir

Dennis Riegel

John Meinert

Ivan Bull

Jane Burns

John Simmons

Scott Rhine

Walter O'Connor

Michael Diamond

Robert Sack

Brenda Birkett

Bill Glezen

Putting Technology in Its Place: The Classroom

by *Kathryn L. Conway*

The traditional classroom is by nature a mass medium, or at least a small-group medium. Introducing information technology into this environment is challenging in many ways. For example, the origin of the microcomputer as a personal computer has made its integration into the classroom awkward. This situation has been compounded by the different technical means used to create images on a computer monitor and those used by a video projection system to display an image to a larger group.

Many schools have set up microcomputer labs—facilities where students go to use the computer for their own work independently or to access self-instructional courseware or programs. This approach places microcomputers in the hands of the students, but without the presence of the instructor in a “live, real-time mode” to facilitate the instructional process and moderate it for the varied learning styles typically represented in a class. While there is an important role for student microcomputing labs, they still don’t address the challenge of placing the advantages of computing technology in the classroom itself.

On the other hand, when we look at the possibility of including video communications in the classroom, we find a different set of problems. Video has appeared most frequently in classrooms in the form of pre-produced instructional materials or as broadcast programs. In these situations, the instructor can be present as video materials are viewed, and, in some cases, can stop to review the a specific point in program. There is no opportunity, however, for interaction with the program itself or the presenter of the information.

The Instructional Technologies unit of the Office of Information Technology at the University of North Carolina—Chapel Hill (UNC—CH) has developed a series of special classroom designs over the years that provide the major modes for using technology interactively in the classroom. These classrooms are the Master Classroom, Computer Classroom, and Teleclassroom. Each of these classroom designs is an attempt to create a teaching/learning environment organized around specific information and communications capabilities that offer specialized instructional possibilities while providing flexibility to the instructor.

Each of these setups begins with the classroom itself as a foundation, rather than, say, the model of a microcomputing lab or television studio. In this model particular, the goal of classroom design is to provide a very flexible environment integrating the means to access and present information in a variety of ways, with maximum flexibility for interaction between and among teacher, student and information. To achieve these qualities, these facilities must combine various computing, visualization, networking and human factors. *(continued on back page)*

. . . the goal of classroom design is to provide a very flexible environment integrating the means to access and present information in a variety of ways. . . .

1991 John L. Carey Scholarships

The AICPA awarded John L. Carey Scholarships totaling \$12,000 to Joseph E. Jackson, Kimberly Ann Ondreck and Joli Robinson. The scholarships are awarded annually to outstanding liberal arts graduates of Yale University and the Universities of Georgia and Illinois who enter a master’s degree program in accounting and work toward a career in professional accounting.

Joseph Jackson earned a B.A. in History from Yale University in May and will enter New York University’s Stern School of Business M.S. in Accounting Program in June. **Kim Ondreck** graduated in May from Yale University with a B.A. in Economics and Mathematics and will also enter NYU’s M.S. in Accounting program in June. The NYU M.S. program in accounting allows students to alternate full-time study with full-time employment/part-time study during its 18-month duration. Both Mr. Jackson and Ms. Ondreck will be employed by Deloitte & Touche while enrolled in the master’s program. **Joli Robinson** completed her junior year at the University of Illinois at Urbana—Champaign this May, where she is majoring in Speech Communication. Ms. Robinson will enter an accelerated one-and-a-half year Master of Accounting Science program at Illinois next year.

John L. Carey was chief of staff of the American Institute of CPAs for over thirty years. The scholarship fund was created by contributions from members of the accounting profession to honor him upon his retirement from the AICPA in 1969. A graduate of Yale University, Mr. Carey was a Visiting Professor at the University of Illinois at Urbana—Champaign and the University of Georgia after his retirement. Program information and application forms are available from the American Institute of CPAs, Academic and Career Development, 1211 Avenue of the Americas, New York, NY 10036. ■

to expand. While it is likely that a smaller number of firms will provide audit and attest services, government, education and training, and environmental issues will all result in responsibilities and opportunities for CPA firms in the future. With all of the above, there will be pressure on the image of CPAs. The development of a greater range of services, particularly when the delivery of those services involves aggressive marketing techniques, could adversely affect the public's perception of the integrity and objectivity of CPAs, even though these fundamental behavioral standards will continue to be observed by members. Considering the perception that offering certain services poses a conflict of interest, it will be more difficult for CPA firms to capitalize on their reputation for objectivity.

Quality of practice will be difficult to maintain. Greater pressure will be placed on the integrity of CPAs, and we will all continue to be challenged in the future. In the final analysis, however, the profession will always be judged by the quality of its work.

COMPLEXITY

Constantly changing tax laws, the development of innovative financing techniques, greater involvement by government in evaluating the effectiveness of the audit function, and questions about the utility of periodic historical-cost financial statements are all issues we will have to deal with in a more complex environment.

In terms of frequent changes in tax laws, that obviously

has an effect on maintaining the quality of tax work. And certainly, auditors are going to be faced with a more difficult environment. Increasingly complex business transactions and methods of financing will complicate their jobs.

We believe the profession will experience both difficulty and opportunity as we move toward an information-based economy, and as the attest function covers an expanding range of information. There will be pressure on accountants to take on watchdog roles in professional activities, and to accept greater responsibility for fraud detection by reporting on clients' internal controls and their compliance with laws and regulations.

The gap between public expectations and ability of the profession to meet these expectations will continue, with the public demanding that CPAs provide a higher level of performance. Providing standards of professional performance and monitoring compliance will remain one of the Institute's most important roles.

Legal liability is also likely to remain an issue despite constant improvement in practice quality. The degree of concern will undoubtedly lead to changes in the legal structure of firms.

In the future, CPA firms will provide more forward-looking services, and the relative value of future-oriented financial and other information will grow. The increasing complexity of financial reporting will, however, make professional standards more complex, and more difficult and costly to apply. All told, the growing complexities of the business world will add to the cost of obtaining and maintaining a license, add

(concludes on following page)

Questions to Ask in the New Environment

- Who are our clients and what are their needs?
 - Can we meet all our clients' needs?
 - Can we deliver a broad range of services, or should we seek to become a niche firm?
 - Should we consider networking with other firms?
 - Should we change the basis by which we charge for our services?
 - How can our firm gain expertise in the global marketplace?
 - How do we learn what our clients need to know in order to operate in that marketplace?
 - What resources are going to be necessary to deliver quality services?
 - How much capital do we need and how do we get it?
 - How can we gain access to technology without a huge investment on our part?
 - What types of people do we need, where can we find them, and what will we have to pay them?
 - How will we motivate them?
 - To what extent should we hire non-CPAs as full-time, long-term career employees?
 - How can we be sure the firm delivers quality service?
 - What controls do we have in place for supervision and review?
 - Are we sure that staff stays current with professional standards?
-

During the summer, Alaska became the seventeenth state to adopt the **150-hour education requirement**.

By the end of 1992, most of the 54 jurisdictions which license certified public accountants will have made progress toward adoption of the 150-hour requirement as a condition of taking the Uniform CPA Examination. To assist in implementation of the require-

ment, the AICPA and NASBA have jointly prepared guidelines for legislation and regulations. For a copy, call the Academic & Career Development Division: (212) 575-6358.

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Robert W. Rouse, of Auburn University's School of Accountancy, has been appointed the 1991-92 SEC Academic Fellow. Dr. Rouse, a member of the AICPA Accounting Educa-

tors Subcommittee since 1989 and a frequent CPE instructor, will take over for outgoing Fellow Tom Weirich in September. Rouse will live in the Washington, DC area during his one-year term.

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Mark your calendars! The week of September 2 is **National Financial Services Week** and the week of September 16 is **Annual Report**

to Shareholders Week.

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The Institute's **Technical Information Service** answers questions on technical matters such as accounting principles, financial statement presentation, auditing and reporting standards, and certain aspects of professional practice (excluding tax and legal matters). Call (800) 223-4158; in New York State, (800) 522-5430.

to the pressure for uniform licensing standards, and prompt an accommodating expansion of the CPA examination.

HUMAN RESOURCES

The pool of accounting graduates is forecast to remain relatively constant in the years ahead. Demand for qualified graduates may exceed the supply, however. A greater proportion of entry-level personnel and CPAs will be women, but the profession will still have difficulty recruiting minorities. Greater efforts will, therefore, be needed to recruit and retain minorities, as well as to improve their and women's upward mobility.

Changing social values and the needs of two-income families will put quality-of-life considerations ahead of career desires, in many instances. Staff motivation will thus pose new challenges. There is little doubt that, in the coming years, the skills of CPAs as a group will be more diverse than they are at present. To meet rapidly changing needs, firms will put increased emphasis on their staff's obtaining additional education and training. More paraprofessionals will be hired, and life-style considerations will give rise to more turnover in firms, to changes in the benefits packages offered, and to more part-time practitioners.

CONCLUSION

CPAs operating in a global marketplace face challenges posed by expanding information technology, greater competition, and a more complex business environment. The Institute's assumptions about the future see firms meeting clients' changing needs by providing a growing array of services delivered by people who have considerably different skills and desires than has been traditional in CPA firms. The challenge for management, in this environment, is to figure out how to use the firm's resources to deliver quality services in a manner that optimizes long-term profitability. ■



Philip B. Chenok

Spark an Interest

AICPA Recruitment Materials

The AICPA has several recruitment materials available of interest to college administrators and students. These include:

Take the CPA Challenge, a 12-page brochure presenting the many different career paths that accounting offers and outlining the educational requirements for each. The brochure is free and may be ordered in quantity from the AICPA order department (see below). Product #870123.

Your Accounting Career: Have You Thought About Personal Financial Planning? This brochure describes the process of becoming a financial planner and offers details on what CPAs do as financial planners. Gratis copies are available by calling the AICPA Personal Financial Planning Division at (800) 966-PFP9.

A License to Succeed, a 13-minute video which captures the opportunities and challenges facing four young CPAs in different types of work. To borrow this tape, contact Modern Talking Pictures at (800) 243-6877; to purchase, contact the order department: Product #882355 (VHS) or Product #882357 (U-Matic). The purchase price is \$35.

The AICPA Order Department may be reached at (800) 334-6961; in New York State, (800) 248-0445. Write to them at PO Box 1003, New York, NY 10108-1003. ■

Practice Analysis (continued from front page)

A task force is now using the results of the 1991 practice analysis to decide if changes are needed in the content of the Uniform CPA Examination. The results also will be used to decide the best ways to assess the important skills identified by the practice analysis. Copies of the report, *Practice Analysis of Certified Public Accountants in Public Practice*, can be obtained from the AICPA Order Department for \$37.50 (order #079300; AICPA member discounts apply).

In addition, researchers may be interested to know that the raw data on which the results of the practice analysis survey are based are available on IBM-standard diskettes; separate databases have been created in the areas of A&A, tax compliance, tax planning/consultation, tax representation, MAS, and PFP. These can be adjusted or manipulated to meet individual research requirements.

For more information about receiving the computer files behind the practice analysis, contact Bruce Biskin at the AICPA: (212) 575-7654. ■

The AICPA Library's staff can offer assistance on a broad range of business topics. AICPA members anywhere in the U.S. may borrow from the library's extensive collection. For assistance, call one of these toll-free numbers: (800) 223-4155; in New York State, (800) 522-5434.

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The Total On-Line Tax and Accounting Library (TOTAL) is

a subset of the Institute's NAARS library. Subscribers to TOTAL have access to different types of files, including corporate and local government annual reports and all current and superseded authoritative and semi-authoritative literature from the AICPA, FASB, GASB, and SEC. TOTAL subscribers can also access tax and other information. For details, call Hal Clark at the AICPA:

(212) 575-6393. And don't forget to check with your Mead Data representative to find out about academic discounts now available for the NAARS on-line service.

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The 1991 Annual Conference of the League for Innovation in the Community College will be held November 3-6 in San Diego, California. Entitled "The Difference Technology

Makes," the conference will focus on technology's role in improving teaching and learning. The event will include 150 sessions on instructional and other applications of technology in academe.

For more information, contact the League for Innovation in the Community College, 25431 Cabot Road, Suite 204, Laguna Hills, CA 92653; telephone (714) 855-0710.

THE MASTER CLASSROOM

Master Classrooms at UNC-CH provide a wide range of computer, media, projection, and communications capabilities, including connection to our campus broadband cable for both video and data reception and transmission. Each master classroom contains two microcomputers for instructional purposes; one is an IBM Model 70 and the other is a Macintosh IIsi. Both microcomputers are connected to the broadband cable system via Ethernet cards. Computer projection capabilities are provided by ceiling-mounted, multi-scan video projection systems. Master Classrooms also contain a 16mm film projector, a slide projector and an overhead transparency projector.

THE COMPUTER CLASSROOM

The Computer Classroom was developed as an outgrowth of the Master Classroom. Once the teachers were able to integrate the computer into their classroom lectures and presentations, many of them wanted to have individual computers available to the students to encourage hands-on learning. As a result, we developed our first Computer Classroom. Although individual student computer workstations are what makes this classroom special, it is not a computer "lab," but a classroom designed for all types of computer-intensive courses. In addition to computers, this classroom has a whiteboard and media support comparable to a Master Classroom.

The Computer Classroom is equipped with 21 student workstations and one faculty workstation. Each workstation includes an IBM Personal System/2 Model 55SX microcomputer with at least 2 megabytes of RAM, a 1.44 megabyte 3.5-inch floppy disk drive, a 30 megabyte hard disk drive, a VGA color monitor, and a keyboard and mouse. Each of these workstations is connected to a fileserver

running Novell Netware for access to files and software, as well as communications and printing services.

THE TELECLASSROOM

The Instructional Technologies unit's video communications services provide a means for the UNC-CH campus to interact with other campuses and institutions through teleclasses, teleconferences, research collaborations, seminars, colloquia, and special interest programs. Our Teleclassrooms are designed to allow faculty and students to conduct and participate in live,

Don't miss the 1991 AICPA Accounting Educators Mini-Conference, November 1-2 in Atlanta. Entitled "Innovations in Accounting Pedagogy," the conference will focus on the use of the case method and on electronic and interactive technologies for the classroom of the future. Details and a registration coupon appear on page 5.

two-way televised classes with students and faculty located at 10 other sites across the state. The two-way communications capabilities provide the means for all participants to see and hear each other simultaneously and in real time, creating a visual "virtual proximity" which produces an environment more like face-to-face classes or meetings.

The Teleclassroom is laid out with 36 desks equipped with 18 low-profile desk microphones (one microphone for every two students). The instructor lectures from a fixed control podium, but can move about freely in the classroom since a wireless lavalier microphone is provided. Two cameras mounted at the rear of the classroom

provide close-up and wide-angle shots of the instructor, while a third camera mounted at the front of the room televises the students. A fourth camera is ceiling-mounted above the podium and focused on the instructor's notes; this is, in effect, the "chalkboard."

INTERACTIVE LEARNING

The instructional power of these classrooms comes from their ability to provide interactive information environments. These environments give both teachers and students the ability to access and manipulate information sources, products, and processes through a variety of information and communications modes.

Although the instructional capabilities of these different classrooms are specialized in their technical functions, they are not specialized in their curricular applications; that is, they may be used by all academic departments, ranging from the fine arts to the sciences. This characteristic, along with their networking, adds flexibility and cost-effectiveness to their use. At the University of North Carolina-Chapel Hill, we see these classroom models as effective ways to support instruction with the best return on our information technology dollar—a growing concern on many campuses.

For more detailed technical information about creating Master Classrooms, see *Master Classrooms: Classroom Design with Technology in Mind*, which may be obtained through the Institute for Academic Technology. ■

Kathryn Conway is Director of Instructional Technologies at the University of North Carolina-Chapel Hill, where she has provided technological support to faculty and instructional programs at UNC for 15 years.

This article is adapted from a piece which appeared in IAT Briefings (1:2), a publication of the Institute for Academic Technology. Operated by the University of North Carolina under a grant from the IBM Corporation, the IAT offers publications, seminars, workshops, and electronic interactive avenues for the exploration and development of academic computing. The IAT may be reached at (919) 560-5031.