A SURVEY OF INSTRUCTION IN COMPUTER USE IN PUBLIC RELATIONS PROGRAMS IN SCHOOLS AND DEPARTMENTS OF JOURNALISM

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PREFACE

This study is concerned with the educational preparation of public relations majors in higher education with respect to computers in general and the role of computer technology in public relations practice in particular, and with the attitudes of public relations faculty members toward such instruction. A secondary concern of this study is a description of public relations educational programs and faculty.

The author wishes to express his appreciation to his major adviser, Dr. William R. Steng, for his guidance and assistance throughout this study despite personal adversity. Appreciation is also expressed to other committee members, Dr. Robert B. Kamm, Dr. Thomas A. Karman and Dr. William J. Rugg for their aid in preparing the final manuscript.

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CHAPTER I

INTRODUCTION

Public Relations Today

Public relations is a rapidly-growing, diverse function that involves more than half-a-million practitioners and is present in almost every type of organization in our society, ranging from community charities to the largest multi-national corporations.

Because of its diversity, it is difficult to define. Yet, an understanding of what public relations is and what public relations practitioners do is essential to an understanding of this study.

Public relations is basically a communication function that affects an organization's relationships with others in its environment of concern. It includes communication as well as the organization's performance which affects how others perceive the organization.

Cutlip, Center and Broom -- authors of a popular college textbook on public relations -- conceptually described public relations as a

> management function that identifies, establishes, and maintains mutually beneficial relationships between an organization and the various publics on whom its success or failure depends.[1]

An operational definition made popular by the Public Relations News describes public relations as the management function which

> evaluates public attitudes, identifies the policies and procedures of an individual or an organization with the public interest, and plans and executes a program of action to earn public understanding and acceptance.[2]

Subfunctions of public relations include public service advertising, controversy advertising, image advertising, publicity, lobbying, fund raising, public affairs, press-agentry, issues management, media relations, community relations, shareholder relations, labor relations, financial relations, consumer affairs, government relations, and more.

Public relations serves almost every type of organization in our society: businesses of all types and sizes, government at all levels, school districts and educational institutions, the armed forces, churches, charities, arts and cultural organizations, athletic teams, hospitals and health care organizations, business and professional associations, and any other institution or organization that has a need to build mutual understanding and positive relationships between itself and those people who affect it or are affected by it.

Tasks performed by public relations practitioners can be grouped into several primary categories:

WRITING: News releases, newsletters, correspondence, reports, speeches, booklet texts, radio and television copy, film scripts, trade paper and magazine articles, institutional advertisements, product information, and technical materials.

EDITING: Special publications, employee newsletters, shareholder reports, and other communications directed to internal and external publics.

MEDIA RELATIONS/PLACEMENT: Contacting daily news media, magazines, sunday supplements, free-lance writers, and trade publications with the intent of getting them to publish or broadcast news and features about or originated by the organization. Responding to media requests for information or spokespersons.

SPECIAL EVENTS: Arranging and managing press conferences, convention exhibits, open houses, celebrations, fund-raising events, special observances, contests, and award programs.

SPEAKING: Appearing before groups and arranging platforms for others before appropriate audiences by managing a speakers' bureau.

PRODUCTION: Creating communications using multimedia

knowledge and skills; including art, photography, and layout for brochures, booklets, reports, institutional advertisements, and periodical publications; recording and editing audio and video tapes; and preparation of audio-visual presentations.

RESEARCH: Gathering intelligence--enabling the organizations to plan programs responsive to its publics and problem situations, monitoring public relations program effectiveness during implementation, and evaluating program impact.

PROGRAMMING AND COUNSELING: Determining needs, priorities, goals, publics, objectives, and strategies. Collaborating with management or clients in a problem-solving process.

TRAINING: Working with executives and other organizational representatives to prepare them for dealing with the media, and for making presentations and other public appearances. In-service staff development.

MANAGEMENT: Administering the operation of the public relations function -- personnel, budget, and programs.[3]

To perform all these functions, there were an estimated 384,000 persons in the United States at the end of 1984 who claimed to be in the practice of public relations. And, if clearly related job titles such as fund raiser and lobbyist had been included, the number of practitioners would have reached 540,000, with a Bureau of Labor projected growth rate for the field at between 36 and 57 percent until 1990.[4]

Four of every five large companies and trade associations conduct formalized public relations activities, and there are about 1,500 public relations counseling firms.[5]

Of the many professional associations serving the field of public relations, the Public Relations Society of America had 12,700 members at the end of 1985 and the International Association of Business Communicators had 12,000 (including international members).[6] These are the two largest public relations professional associations.

For the 1983-84 school year, there were more than 15,000 students

majoring in public relations at nearly 200 colleges and universities.[7] The number of undergraduates studying public relations at journalism schools had more than doubled in five years.[8]

The field of public relations which these students will enter has been in a state of flux since its inception at the beginning of this century. Reacting to changes in society and its institutions, to the power of public opinion, and to increasingly sophisticated communications technologies, the practice of public relations has changed considerably. Indeed, changes in technology are seen as the driving force behind many of the challenges facing public relations practitioners:

> . . . new communications technologies and techniques are providing public relations professionals with the means to communicate more information to more audiences. Indeed, it is the combination of the exploding means of communications technology and the exploding availability of that technologically available communications that is rapidly changing the face of public relations.[9]

While there are many changes affecting the field, computers have been singled out as the impetus for much of what is taking place. "Few endeavors are more information intensive than public relations, and a personal computer can help locate and organize that critical information quickly and completely," wrote one practitioner.[10]

Allan Kennedy, co-author of Corporate Cultures and writing for the International Association of Business Communicators, saw the computer as the driving force behind changes in public relations and communications:

> I believe we are on the threshold of a quiet but important revolution in the way a lot of mainstream communication efforts are carried out. Behind this revolution is the microcomputer and the nearly incredible capacity of today's personal computers to personalize communication to target audiences.[11]

Peter Dowd, former vice president for Hill & Knowlton, identified the computer as "the single most important tool for public relations

invented since the telephone."[12]

Martin F. Cahill, writing in the Public Relations Quarterly, coined the term "computer assisted public relations"[13] and summed up the role of computers in contemporary public relations:

> The heart and core of both the public relations and public affairs functions is information management. We gather information (research); we analyze, organize and interpret information (write); and we release, present counsel and otherwise disseminate information (communicate). The computer is a powerful aid in the performance of this work.[14]

In his 1985 "the year ahead" article in the journal serving the Public Relations Society of America, public relations agency president Bill Cantor emphasized that practitioners must master the new tools and techniques:

> Although technology will never replace the human element in public relations and communications, the public relations executive must have a working knowledge of the new technologies and be conversant with their uses.[15]

Public Relations Education

The burden posed by the challenges of the future "has . . . created a need for more skilled, more professional communicators," according to Loet A. Velmans of Hill & Knowlton. For the future, he wrote, "public relations needs better training" and "the key here is education and training"[16] to meet the demands of the future.

Education, to fulfill its role in preparing young people for the practice of public relations, must include those skills required by the profession. This means that if technology, and computers in particular, are essential elements of the practice of public relations, education must address this. But, as two educators pointed out:

> We are all aware of the communication revolution, continuously fueled by interrelated and shifting developments in technology,

> economics, social patterns and public policy. A critical contemporary critique of journalism-mass communication education is based a great deal on the assumption that journalism-mass communication programs generally are unresponsive to the challenge of these revolutionary developments.[17]

On one hand, it appears that computers -- among other things -- are changing the practice of public relations and have an increasingly important role. Educators, therefore, are obligated to consider the profession's needs as they prepare young people to enter the field.

On the other, it is unclear whether educators are addressing this need or even see it as a need. This is not to say educators are not meeting their obligations, only that there is a lack of information.

Marshall McLuhan observed that computers are in the vanguard of the "new communications revolution,"[18] and as professional communicators, it follows that public relations practitioners should be in the vanguard of those adapting computers to communication tasks.

Education is the means for enabling today's students and tomorrow's practitioners to take their places in the vanguard.

In sum, "public relations people can't afford to fall behind in a generation that learns to interact with computers in grade school."[19]

Statement of the Problem

The overall problem, of which this study is a part, is the extent of congruence between instruction on computers for public relations majors in higher education, and the requirements of public relations practice with respect to knowledge and use of computers.

The specific problem to be addressed is the general lack of information about the educational preparation of public relations students for using computers in public relations practice, and the

opinions of educators toward the need for such preparation.

Purpose of the Study

The purpose of this study is to examine public relations education and collect data about the extent of instruction on computers for students about to enter a profession which is a heavy user of computers.

In addition, the study will collect information concerning the opinions of public relations educators toward the role of computers in public relations education and in the profession.

The study is the first step in an examination of how well higher education is meeting the needs of the public relations profession with respect to computer use.

This study addresses the question, "how are future public relations practitioners being prepared to understand and use computers in public relations practice?" Subsequent research may examine specific needs of the profession and address how education may best meet those needs.

Significance of the Study

There is a wealth of literature supporting the use of computers in contemporary public relations, and in the years to come.

Use of computers in public relations implies that public relations education should include computers as an important subject area for public relations students.

There is no comprehensive, published study of the attention given to computers in public relations education or of the perceptions of educators toward instruction on computers.

The results of this study should prove useful to public relations

professionals concerned about the quality and scope of public relations education; to educators concerned about meeting the needs of the profession and keeping up with other colleges and universities; and to professional-educational organizations that study the needs of the profession and recommend education to meet those needs.

Limitations

This study is limited to about 180 colleges and universities which have public relations programs as identified by the current Journalism Directory published by the Association for Education in Journalism and Mass Communications.[20]

There are approximately 320 colleges and universities in the United States which have courses in public relations. Only about half of these, however, offer a major or emphasis in public relations.

Still, there is no requirement that entrants into the field of public relations be products of a bonafide public relations program. Graduates of institutions without full public relations programs who have had only one or two courses in public relations may obtain public relations employment.

Plus, graduates of news-editorial sequences and other communication-related majors -- as well as those without college educations -- may obtain public relations employment.

This study, however, will examine only the education given to public relations students at institutions with identified public relations sequences.

Assumptions

It is assumed that responses to the survey will be complete, objective and honest, and that educators will not perceive their responses as being critical of themselves or their programs.

It is assumed that administrators who receive the survey questionnaires will forward them to the persons responsible for the public relations programs at that institution.

It is assumed that public relations educators will have knowledge of other courses in their institutions required of PR majors that include instruction on computers.

It is assumed that public relations educators will have some knowledge of the use of computers in the profession.

Organization of the Study

Chapter II, "Review of the Literature"

The literature review will briefly examine those characteristics of computers which make them important to public relations and will examine the use of computers in the field today and predictions for growth.

The role of computers in public relations education will be examined, as will be the role of computers in two closely allied fields -- business and journalism education.

Problems identified in the literature concerning the inclusion of computers in public relations education will be identified as well.

Chapter III, "Methodology"

The chapter on methodology will describe the population to be

surveyed and the survey instrument, with a discussion of why certain questions are to be included.

The schedule for administering the survey questionnaire and for followup mailings will be outlined.

Finally, the chapter will outline the data that will be presented and discussed, how it will be analyzed, and comparisons to be made.

Chapter IV, "Analysis"

The fourth chapter will present, analyze and describe the data collected by the survey.

Chapter V, "Discussion, Conclusions and Recommendations"

The final chapter will discuss the findings and analysis, reach conclusions about preparation on computer use given public relations students, and will identify topics for further study. If warranted by the survey results, recommendations for including instruction on computers in public relations education will be offered.

Plus, the final chapter will attempt to place instruction on computers and other technology in public relations education in perspective. While technology is the focus of this study,

> No matter how far we progress toward sophisticated management development or toward utilization of modern technological tools, ours will always be a "people" business.[21]

ENDNOTES

[1]Scott M. Cutlip, Allen H. Center, and Glen M. Broom, Effective Public Relations (6th ed., Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1985), p. 4.

[2]Ibid., p. 3.

[3]Ibid., p. 64.

[4]Dennis L. Wilcox, Phillip H. Ault, and Warren K. Agee, Public Relations Strategies and Tactics (New York: Harper & Row, Publishers, 1986), p. 4.

[5]Ibid., p. 53.

[6]Ibid., p. 100.

[7]Ibid., p. 54.

[8]Fraser P. Seitel, The Practice of Public Relations (2nd ed., Columbus, Ohio: Charles E. Merrill Publishing Company, 1984), p. 502.

[9]Wilcox, Ault and Agee, p. 607.

[10]Veronica Kane, "Tomorrow's Library May Be in Your Office Today," Public Relations Journal 41 (July 1985), p. 30.

[11]Allan Kennedy, "Back-Fence Conversations: New Tools for Quality Communications," Communication World 1 (November 1983), p. 1.

[12]Norman R. Nager and Allen T. Harrell, Public Relations Management by Objectives (New York: Longman, Inc., 1984), p. 184.

[13]Martin F. Cahill, "The Desk-Top Computer as PR Consultant," Public Relations Quarterly 28 (Spring 1983), p. 8.

[14]Ibid., p. 10.

[15]Bill Cantor, "Forecast '85 -- The Year Ahead in Public Relations," Public Relations Journal 41 (February 1985), p. 23

[16]Loet A. Velmans, "Public Relations -- What It Is and What It Does," Inside Public Relations ed. Bill Cantor, (New York: Longman Inc., 1984), pps. 5, 6.

[17]Robert O. Blanchard and William G. Christ, "In Search of the Unit Core: Commonalities in Curricula," Journalism Educator 40 (Autumn 1985), p. 28.

[18]Frederick C. Whitney, Mass Media and Mass Communications in Society (Dubuque, Iowa: Wm. C. Brown Company Publishers, 1975), p. 59.

[19]Robert L. Fegley, "Public Relations and the Human Art of Management," Public Relations Review, X (Spring 1984), p. 8.

[20]Nancy Doubledee Barclay, ed. Journalism Directory, (Columbia, S.C.: Association for Education in Journalism and Mass Communication, 1985).

[21]Danlel J. Edelman, "Managing the Public Relations Firm in the 21st Century," Public Relations Review 9 (Fall 1983), p. 5.

CHAPTER II

REVIEW OF THE LITERATURE

General

This chapter will focus on the role of computers in the practice of public relations now and in the future, and on computer instruction in education for public relations and related fields. A basic understanding of computers as new technology is important to understanding their role in public relations.

Computer Technology

Introduction

Frenchman Pierre de Chardin coined the term "Noosphere" to describe a world wrapped in a spiderweb of computer networks. "Noos" is a Greek word meaning "mind" and Chardin visualized a world where computers and satellites would make possible the immediate interchange of thoughts, ideas, knowledge and dreams among all mankind -- and a wonderful world would result.[1]

The Past

As soon as humans had a need to count, they had a need for information processing. As their needs grew, so did their need for tools to help them process more information, faster, more efficiently,

more accurately. Notched sticks, ropes with knots, the abacus with its beads, clay tablets -- all were early computers in that they facilitated information processing.

Numerous inventions during the past three centuries have contributed to the development of modern computers. From the first adding machine, the typewriter and the vacuum tube, to the transistor, magnetic disks and the silicon chip -- all have played important roles in making computers possible. Computers were not invented outright but were the combination of a host of other inventions.

The first real computer, the Mark I developed during World War II, was basically a sophisticated calculator, and man first used computers as mathematical calculators capable of handling numbers only.

As machines were developed to handle letters as well as numbers, computers became clerical aids for handling vast numbers of records and documents. Later, computers became elaborate storage devices that could accommodate large amounts of information in relatively small spaces.

Next, developers took advantage of a computer's speed so many users could have access to a single computer through "time sharing" systems.

Actually, the phases of computer development are really stages in man's realization of the computer's capabilities.

Microcomputers -- stand-alone, single-user machines -- were the next step in development as computers became smaller, more self-contained and less expensive. At their current stage of development, computers are being used as communication tools to share information and combine capabilities via electronic networks.

The Present

Computers are information processors, symbol manipulators, that are lightning fast, highly accurate and reliable, able to store vast amounts of information, and to follow "intellectual maps" written by humans.

Probably the main feature of a computer is its ability to manipulate large amounts of information at incredibly fast speeds. Its real power is the combination of speed and logic with human creativity.

Computer information processing consists of (1) providing information to a computer in a form it can use, (2) asking the computer to manipulate that information in a certain way such as classifying, sorting, calculating, comparing or summarizing, and (3) obtaining output, doing something with the results of the manipulation such as storing, communicating, retrieving, reproducing or displaying.

Hardware for input includes punched cards, paper tape, documents written with magnetic ink, documents written with characters for optical sensing, magnetic tapes or disks, keyboards, touch-tone telephones, light pens, voice, touch (on a cathode ray tube screen) and other computers.

The hardware component of a computer that manipulates the information is the central processing unit with storage, control and arithmetic logic elements.

Hardware for computer output includes most of that used for input plus printer and graphic plotter produced documents, microfilm, displays on a cathode ray tube, and data transmission to other computers.

Software (programming) for computers includes instructions for playing games, writing and editing, analyzing, organizing, accounting, managing, drawing and displaying graphically, telecommunicating,

programming, learning, and a wide variety of other tasks from music, weaving, nutrition, exercise and astronomy to meditation, appliance control, media control, postal services, betting and more.[2]

There are numerous categories of computers. A common classification is to group them according to their primary functions, such as (1) game computers, (2) home computers that play games as well as perform rudimentary operations, and (3) business computers that perform a variety of sophisticated functions.

By size and capability, computers can be classified as (1) microcomputers, the smallest machines capable of executing programs, single-user-oriented, stand-alone, desk top, portable or "lap" size, (2) minicomputers, small, general-purpose machines with greater capability, speed and storage capacity, with the capability to serve multiple users, (3) mainframe computers, large, powerful central computers that serve many functions in an organization, and (4) super computers, the fastest, largest, most expensive in existence that are used for complex scientific and governmental functions.

Categorization based on cost is outdated almost immediately due to the rapidly changing costs of computers and peripherals.

Many people view computers as either sophisticated mathematical calculators or as elaborate typewriters. They are, however, communication tools. Not only do they communicate with other computers, but they interact with human beings. Plus, computers coupled with new transmission paths such as fiber optics and satellites offer vast new telecommunications possibilities. Computers are communication terminals that communicate with a variety of other types of terminals -- human as well as electronic.

The Future

There are two general directions of growth for computers: efforts are being made to provide the capabilities of large, central computers to more remote units, and larger networks of computers interacting with one another are being formed.

While these two trends are different, the net result is that computer power is spreading; more people and organizations are receiving more access to greater computer capabilities and resources.

Specific trends in computer hardware include more memory, faster processing speeds, lower costs, smaller size and greater portability. Computers are becoming more popular, and software is being developed with more applications -- from balancing a checkbook to keeping track of grocery coupons. More simplified computer languages are being devised, and both hardware and software are being developed that make human/computer interaction easier. The trend is toward "invisible" terminal devices that make human/computer interaction so easy it will not be noticed.

Computers pose problems as well as promises, however.

As with any new technology, some groups of people and nations will have access and will benefit while others will not. The poorer nations of the world may be unable to take advantage of the benefits computers offer, and the gap between "haves" and "have-nots" will not disappear.

There is also criticism that we are confusing means with ends. That is, we are not using computers to achieve society's goals but are focusing on using computers to be more efficient, to produce more leisure, to be faster at what we do, with no real purpose in mind.

Plus, every new technological development has made great changes

in our society. The printing press, telegraph, train, automobile, radio, airplane, television -- all have left their marks. Just as Henry Ford did not predict his automobile would lead to super highways, fast food chains, drive-in churches and air pollution, so we are unable to predict the psychological and social changes computers will bring. Some changes may be good; others may not be.

One pessimistic view says resistance to technological change, employment and organizational stress brought on by computers, poor data processing practices, lack of security and control of computer data files, and privacy violations will lead to a loss of freedom and individuality, and a general depersonalization.

A more optimistic view is that computers will bring greater efficiency, better quality products and services at lower cost, with increased health and safety. There will be more leisure and opportunities for recreation, as well as greater access to better organized information. Through two-way communication, we will have more responsive government and institutions, and education will be greatly enhanced. Thus, with computers there can be increased freedom and individuality, a more personalized society.[3]

Whichever view is correct, there will be important implications for mass communicators.

The combination of electronic storage and lightning fast transmission may change the nature of news and the news gathering process. More people will have more access to more news from more places -- instantaneously. Plus, people will be able to ask for the news they want.

Some say the role of the "gatekeeper" will become far more

important because of all the information available that must be screened and selected for a medium's audience. Others say the role of the "gatekeeper" will be diminished with the capability of transmitting news directly from the source to the audience.

The cost of producing news for some media may drop radically with computers. For example, about two-thirds of the cost of a newspaper is tied up in newsprint, production and distribution. With computers, newspapers could be produced and distributed electronically instead of on paper. While electronic newspapers may never replace the paper version, there are many areas where computers can reduce costs.

Finally, computers coupled with fiber optics and satellites will allow two-way communication -- feedback from almost anywhere to almost anywhere else, instantaneously. All past developments in mass communications have been one-way; now two-way communication will become a reality. When an audience can literally "talk back" to its television news director, its newspaper editor, legislator, councilman or president, the implications for mass communicators are awesome.

Computers and other new technologies pose interesting challenges for mass communicators and for educators in mass communications.

Professional communicators will have to use and understand computers because computers are rapidly becoming everyday tools. Plus, communicators must be sensitive to the changes in society that computers are causing, communicators must be able to explain these changes, they must help others understand these changes, and they must help others accept the technology and the changes that make this a better society.

The challenge is a big one and there is no way to avoid it. And, it is not coming; it is here.

Computers in Public Relations

Computers are unique in that they can manipulate huge quantities of information at incredibly fast speeds. They are information processors that are reliable and accurate, able to store and organize vast amounts of information to which immediate access can be provided.

Computers use these capabilities in accordance with instructions from human beings that direct computers to perform tasks dealing with writing and editing, analyzing, organizing, accounting, managing, drawing and displaying graphically, calculating, maintaining lists and files, telecommunicating, learning and many more tasks.

Computers will not be discussed here as tools to aid office management and administration -- routine tasks common to many professions -- but as aids to a public relations practitioner's primary function: communication.

The public relations function, according to educators Cutlip, Center and Broom,[4] can be divided into phases or steps: research or fact-finding, planning, action and communication, and evaluation. A convenient way to examine the use of computers in public relations is to look at their use in each of these phases.

Research and Fact-finding

Research is simply asking essential questions ranging from "who are we?" to "what do they think of us?" and "what is our problem?" It is identifying situations and problems that require resolution through communication, as well as developing a body of facts and knowledge from which to work.

One important use of computers in public relations research is as

organizers, as electronic file cabinets for papers, speeches, and articles -- as electronic index cards to store and retrieve notes and information. Practitioners use them to maintain lists and biographies of opinion leaders, lists of news media representatives and other contacts, profiles of interest groups and publics, idea files for annual reports and exhibits, and checklists for crisis plans.[5]

The computer is also invaluable for public opinion polling. With its ability to compile and tabulate huge amounts of data almost instantaneously, the computer radically shortens the time between the taking of a poll and presentation of the final data.[6]

Statistical analysis is another research use of the computer. Use of the computer program "Statistical Package for the Social Sciences" allows public relations researchers to perform a wide variety of statistical tests of survey data.[7]

Computers can determine frequency analyses as well as compute cross tabulations of research data.

> In major public issue studies, the computer analysis can and should produce truly fascinating and intriguing results. Procedures such as multi-variate analysis and regression analysis can construct scales or models of beliefs or opinions that help to explain in depth why people behave the way they do.[8]

Content analysis, a research technique that examines, among other things, what the press is saying, is made easier through the use of computers for probability sampling and statistical analysis of results.

> Computers help eliminate sampling errors, they allow researchers to compare and contrast variables, they reduce time requirements and they help make research more feasible simply because they make the handling of vast amounts of information easier. Through the use of computers, more information is available for public relations decision making because more information can be manipulated in more meaningful ways.[9]

A computer's ability to handle numerous variables makes possible

the identification and isolation of "contrived publics," audiences identified on the basis of an almost infinite number of variables. "Demography isolates people so they can be found and persuaded."[10]

On-line access to any number of data banks is another important research function made possible by computers. For example, access to the NEXIS Information Retrieval System by one corporation's public affairs department allows the staff to:

- Prepare dossiers on candidates for company positions.
- Help management study the experiences of other companies faced with plant shutdowns.
- Trace trends in key public issues and legislative developments.,
- Research federal issues.
- Monitor use of press releases.
- Monitor press coverage of competitors.
- Keep tabs on marketing news.
- Monitor statements by key officials.[11]

Plus, the same company uses NEXIS for speech preparation. For example, when preparing a speech for a corporate executive on tax avoidance devices that developed as a reaction to high tax rates, the researchers searched the NEXIS data bank for articles on the "underground economy."

> One touch of a button displayed the number of articles on the underground economy and the places where they had appeared. Another touch displayed highlights of the most recent story. Another displayed the full story. And, another caused the full text of the story to be printed out for use.[12]

The Environmental Protection Agency (EPA) uses data banks in a similar fashion to prepare briefing books for top executives to use at meetings, press interviews and congressional testimony. The EPA data banks contain daily news files of newspaper and magazine clippings, an "issues information file" with background and status summaries of a variety of EPA issues and concerns, and a speech resources file that contains all past speeches and statements by government officials.[13]

Another much-used data system is Lockheed's DIALOG program that accesses 150 data pools nationwide. Public relations researchers subscribing to this computer system have access to articles on the social sciences, the arts, humanities, business and finance, current affairs, the mass media, and all categories of statistics. Plus, the service includes citations to articles in more than 40,000 journals in 40 languages.[14]

One computer program enables public relations researchers to monitor wire service output in order to identify news items pertaining to their organization or interest. The Electronic News Processing System

> compares every incoming [wire service] story with a list of up to 50 key words that the user wants to monitor. The system sorts and stores material for retrieval or printing later.[15]

Bulletins and urgent stories make the system issue an audio warning and the title of the story is automatically displayed on a computer screen.

The public relations firm of E. Bruce Harrison Company uses computers to interact with clients nationwide. The company deals with legal and legislative matters, including federal and state regulations and legislation and court decisions where there is a vast amount of information that must be rapidly accessed. Instead of paper mail and telephone, the public relations researchers use computers to "converse" back and forth with clients to answer detailed questions on legal matters.[16]

Other corporate public relations departments use computers for issue analysis; strategic planning; keeping track of legislators' voting records, personal traits and habits; and tracking speeches and positions

on issues of concern to the corporation.[17]

Nearly half of all corporate public affairs and public relations departments subscribe to one information service or another, with the New York Times Information Bank Service being the most popular.[18]

For research of employee opinions and concerns, computer programs now are being used to develop survey instruments.

The "Climate Attitude Survey Sequence" computer program developed by management psychologists has 15 survey categories with 370 statements from which researchers can pick items for tailored questionnaires. Plus, preparers can add 80 questions of their own to the categories. The program develops questionnaires dealing with:

Work responsibilities.
Immediate supervisors.
Top management.
Co-workers, same department.
Co-workers, other departments.
Company reputation.
Working conditions.
Benefits evaluation.
Benefits understanding.
Personal future.
Personal needs.
Training and development.
Personnel policies.
In-house publications.[19]

"InterviewDisk" developed by Marketing Metrics of New Jersey is a survey technique intended for audiences that have access to personal computers, such as lawyers, accountants, business executives, etc.

A computer disk with survey questions and room for answers is sent to the sample. The survey can be completed at the convenience of the respondent, and the developers claim response rate is better than with other survey techniques. Cost of the technique is about half of a comparable telephone survey.

> Diskette is capable of administering many questioning techniques including: multiple-choice; semantic differential scales; constant sum tasks; paired-comparison judgments; information board procedures; open-ended questions.[20]

Upon return of the completed questionnaire-disk, a computer tabulates the responses, performs statistical analysis and prints the results.

Other corporate uses of computers include maintaining name lists of employees, retirees, media representatives and stockholders; general company statistics; company public statements; speeches by company officials; press releases; marketing data; company publications; state and federal regulations; testimony to government agencies; advertising data; company audio-visuals; pending legislation; policies; congressional committee reports; biographies on members of state and federal legislatures; and biographies on community opinion leaders.[21]

Planning

A use of computers for planning and management in public relations involves the simulation of human problem solving, decision making, conflict resolution, voter response to candidates and issues, sales forecasting and reference group influence.[22] If human behavior can be described by a flow chart, then the behavior process can be computerized and researchers can deal with "what if" situations to develop the most effective and efficient strategies for persuasion.

Computerized flow charts of consumer decision making "mathematically estimate how the market of consumers will behave if the implications and assumptions of the descriptions and flow charts are accepted."[23]

Another public relations management use of computers is in

developing crisis management plans. Computers are ideal for examining "options before positions are frozen," and for reviewing communication plans while there remains the opportunity to strengthen them.[24]

> With the aid of computer programming, your organization may be able to quickly project almost infinite combinations of variables that might arise, not only in responding to questions but also in dealing with entire crisis situations.[25]

Action and Communication

The computer's ability to maintain lists, merge files and examine publics on the basis of any number of variables helps public relations practitioners develop tailored messages for their audiences.

For computerized direct mail, for example, demographics are collected and letters are constructed to appeal to these distinctive characteristics.

> The accommodating computer then can match these paragraphs with each individual on a list and send an 'ersatz' personal letter to him couched exclusively in terms of that individual's presumed interests.[26]

Politicians routinely use computers to manufacture "personalized" letters to their constituents, and -- in the opposite direction -- interest groups wanting to persuade their legislators routinely use computers to generate letters supporting one issue or another.[27]

In the 1970 senatorial race in Nevada, candidates used computers to produce direct mail that was "personalized" for the different groups of potential voters. Demographic analysis produced 24 distinctive groups based on political party, geographic location, vocation and concerns on different issues. Individual letters with tailored arguments were then sent to these different groups.[28]

It is now routine for advertising messages to be placed by selected

geographical regions to reach one or any number of predetermined publics. It makes no difference whether the advertising is for commercial products or ideas, computers make messages both more personal and more sophisticated.[29]

Lobbyists also use computers. The National Association of Manufacturers, for example, has computerized all its 13,000 member firms in various categories which enables it to call on those firms best suited to contact a legislator on an issue of interest. The United Auto Workers uses a computer to identify all the plants staffed by its membership, and the National Rifle Association has its membership computer-categorized by congressional district.

The Chamber of Commerce of the United States uses a computer to categorize its corporate executive membership on the basis of legislators with whom the member has "a constituent relationship." Thus, if the Chamber wanted to influence a particular legislator, the computer would identify all the constituents of that legislator, prepare messages for the constituents to send to the legislator, and even address the envelopes. Plus, it can identify the important legislative committees and leaders who would be most worthwhile to contact.[30]

In another type of campaign, a special interest group fighting Texas "blue laws" advertised an 800 telephone number in newspapers for citizens to call if they were opposed to "blue laws."

When citizens made the call, computers gathered personal information, read a statement to the caller, and asked permission to send it to each caller's legislator over the caller's name. Nearly 80,000 supporters were "collected" by computer in this manner, and the laws were repealed.[31]

Computers also have facilitated the distribution of the most common public relations communication product, the news release.

The Associated Press (AP), for example, accepts "floppy disks" from news sources[32] and the AP's computer-to-computer hookup allows newspapers to send stories directly to local AP bureau computers. Thus, public relations stories of regional and national interest will have a better chance of getting AP attention and access to the system is facilitated.[33]

PR Newswire is a computerized service that provides computer distribution of clients' news releases either to media teletype terminals or directly to media computers. An interesting feature of PR Newswire and similar services is not only do they get public relations materials to the news media, but the copy goes into various data bases as well -- where it is on file for anyone seeking information on the topic discussed in the release. Thus, computers help public relations communicators bypass the media gatekeepers.[34]

Trim International, the European equivalent of the American PR newswire provides computerized news distribution service to North American companies who want their news releases distributed to European news media. The service "includes transmission of a release by computerized simultaneous telex to 24 cities in 10 European countries."[35]

One Minneapolis public relations firm developed a NewsWire Central system using computers to store, process and transmit news releases to the wire services, television and radio stations, and 18 newspapers in the Twin Cities area. Draft news releases from the agency's clients are transmitted computer-to-computer to NewsWire

Central, edited at the agency and transmitted simultaneously to media teletype terminals or computers.[36]

Another practitioner reported that "computer-compatible" news releases were becoming essential.

> The crucial question for public relations in all this wizardry is: How will your news releases enter the complex circle of computerized news handling? Increasingly, the media are emphasizing and relying on computer-compatible electronic copy -- ready for prompt recall, review, revision, typesetting or transmission. . . . if your release must compete with all the other news of the day, it is preferable that it be there in the fastest and most compatible form.[37]

The 3M Company introduced the "3M Newsroom" in 1984 which was an electronic news and feature story "clearing house" which journalists could access via their personal computers. Via computer, reporters could get up-to-date news releases, ask questions and request exclusive information.[38]

Computers also are taking over another public relations distribution function, the dissemination of financial information. The government's Securities and Exchange Commission (SEC) requires American corporations to make periodic financial reports both to the commission and to investors. This requirement has grown into a $1 billion program of annual reports which not only report financial information but also promote the organization as well.

The SEC began a two-year test in mid-1984 of EDGAR (Electronic Data Gathering and Retrieval) which, if successful, will allow corporations to make their financial reports by computer instead of paper. Instead of receiving glamorous, and expensive, annual reports in the future, individual investors will receive letters with brief financial summaries and will be given opportunities to access the SEC or other data banks for more detailed financial reports.[39]

Also dealing with financial communications, the Polaroid Corporation's "10-Year Fact Book and Financial Summary" is available on magnetic diskettes for distribution to key financial analysts and the financial press in the United States.[40]

Western Electric uses computers and telephone circuits to distribute an electronic newsletter on company activities to its 35 media relations offices around the United States.

> Like other internal newsletters, Newsprints provides field offices with information on trends and changes in the field, news on what's happening in other locations and information on new surveys and books of interest to communicators. But unlike most newsletters, there are no printing or mailing delays with Newsprints.[41]

When economics cut the news staff at Texas State University news bureau in half -- while the workload remained the same -- a computer network was set up to meet the need for news stories, feature stories, hometown coverage, production of an internal newsletter, numerous alumni publications, and more.[42]

Campus departments were tied together with a computer network and stories were sent to the public information office on the network for editing, then back to the department for checking, and then to a typesetting computer.

For external news releases, access to the news media and wire services was provided by computers as well. Hometown stories were written, edited and transmitted by computer.

The network maintained an internal information system with an electronic "news page," announcements, and a calendar of events.

Another public relations department uses computers to research wire service output to locate stories about clients.

On one occasion, the agency found a story about a potential product

hazard and then searched other data bases to build a detailed file of information on the press report.

The agency next used a computer to draft a public statement and send it to the home office for editing and approval. It then was prepared in final form and transmitted to the appropriate news media via computerized news distribution service.

> Within minutes the statement was on the wire to news outlets across the country and the client's press relations people were calling editors to alert them to the release.[43]

What made the response to this emergency different was that everything was done by desk-top computer. The computer had helped the client

> get an early alert and gain valuable lead time on the breaking story; it helped him quickly find technical information that was vital to him; it helped him organize the information and write a statement; it helped him get prompt clearance, do the final editing, and release it nationally.[44]

Computers have the capability for visual display and this is also of value to PR practitioners.

In some organizations, computer cathode ray tubes are serving as substitutes for 35mm color slides. Instead of producing slides that cost far more in time and money, computers display pictures and charts that can be made into slides when needed. Raw data can be used as input for computer-generated slides of charts.[45]

Computers generate basic "pie" charts, bar graphs and a variety of other standard presentation formats. "The software permits you to label the charts, enter your own figures, select colors or shadings, and print out the graphics in precisely the desired dimensions."[46]

Computer-generated graphics using the latest research data on format and patterns of information help communicators decide which media

format will be most effective in communicating to a particular public. Computers thus design graphics that will be best suited to a particular medium and audience.[47]

Another author wrote that practitioners had just begun to realize the potential of computer graphics to their work.

> The advantages of using computer graphics for designing and producing video presentations, slides, overheads, and hard copies, in black and white or color, may well remove computer graphics from anyone's "luxury" category.[48]

Aside from producing graphics, computers are being used to control multimedia presentations. Sophisticated multimedia presentations using several slide projectors, motion picture projectors and audio tape records can be coupled with computer-generated graphics and computer control for maximum effectiveness. "It is now possible to preprogram all projector and sound cues into a microcomputer that effectively and consistently runs the entire presentation for you."[49]

Computers have for the most part replaced typewriters for writing in public relations offices.[50]

> Computers make possible "word processing, researching and gathering material, writing articles, correcting syntax, grammar and spelling, switching paragraphs, adding/deleting sentences, and producing perfect, finished, original copy without typewriters, paper, ribbons, carbon paper, correction fluid, or dirty hands."[51]

One satisfied computer user, in the course of advising other practitioners on the selection of a word processor, pointed out

> In public relations firms that realize the need to stay ahead of their clients in communications sophistication -- to improve productivity, speed of service, and accuracy -- word processors are found on the desks of their account executives, writers and publications editors.
>
> These firms have found that the use of a word processor can revolutionize such functions as: support-staff and writer productivity; preparation of proposals, news releases, and query letters; storage and updating of mailing lists; and production of publications.[52]

Another practitioner described the change when his office switched to computers:

> The typewriters are gone. We don't have one in the office. The bottles of white-out, rubber cement, indexes and reference books are also gone. We have few file cabinets; we rarely use messengers; even expense-account forms are a thing of the past.[53]

A West Coast public relations-advertising firm uses computers to maintain records of all accounts and accounting, to maintain bank accounts and check book reconciliation, mailing lists of media and opinion leaders, scheduling, trafficking, insertions and work orders for advertisements and production, project budgets, press releases, daily time sheets with analysis of effort and projects. This is done by regular office personnel and account executives; they employ no computer operators.[54]

The public relations executive for Credit Union Executives Society carries his four-pound portable computer with him wherever he goes. He uses it to draft correspondence, prepare newsletter copy and other written materials, and transmits finished material to his office computer by telephone. The office computer is, in turn, connected directly to typesetting equipment.[55]

Another writer, this time a free-lance writer, is reported to take his portable three-pound lap computer to a bar, write his material while sitting in a booth, take it to a telephone, dial a local number, connect the telephone to a modem and "almost instantly publish his work electronically to a potential market of more than 55,000."[56]

For internal company public relations, many companies are using electronic bulletin boards connected to company computer data banks for employee information programs. On a national and international scale, computers are used to tie together the employee information programs of

multi-national corporations. As one Du Pont Company executive pointed out, the computer is

> a great tool for fast, open communication. It gets information to our people who want to know more about events which affect our business and about the directions in which the company is going generally.[57]

The employees of General Motors' Chevrolet-Pontiac-Canada Group need only "lift a finger" to learn of the latest news, local and company events and employee programs.[58]

The company has installed a computer-based, interactive videodisc communications center with a touch-sensitive screen. This format allows employees to choose the information they want to read about, when they want it.

Another unique communication application for computers surfaced following the June 27, 1984, Bill Moyers' broadcast, "A Walk Through the 20th Century with Bill Moyers." The program dealt with the history of public relations and immediately after the broadcast there was a nationwide computer linkup of public relations practitioners to discuss the future of the profession and and determine reactions to the program.[59]

While this use is not significant in itself, the potential for nationwide computer-to-computer conferences, consultations and business relationships is apparent.

This network is called "PRSIG" (Public Relations Special Interest Group) and is an electronic bulletin board that allows practitioners to leave messages for colleagues, receive messages, conduct meetings and on-line discussions, and obtain access to computer programs. The service was initiated in 1984 by the Communication Technology Task Force of the Public Relations Society of America. According to Ronald

Solberg, chairman of the task force,

> We're moving in the right direction. As people realize the power of this, the more valuable it will be. This is one way people can begin to realize the potential of new technologies.[60]

PRSIG became a public forum for all public relations practitioners with a name change in 1985 to "PR & Marketing Forum." A new network, "PRLink" was started in May 1985 by the Public Relations Society of America for society members.

> The service will provide a convenient means of brainstorming with colleagues in the U. S. and Canada and will bring experts in public relations directly to subscribers via educational seminars.[61]

Evaluation

Public relations evaluation is simply answering the question, "Did we hit the target? Did we accomplish what we set out to do -- within the parameters set at the beginning?" Here, too, computers are being used effectively to evaluate public relations efforts.

The Ketchum "Publicity Tracking Model" developed by Ketchum Public Relations in November 1982 uses computers to track what is being said about clients in terms of audience exposure and quality value of the message. Standards agreed upon in advance are programmed into a computer as well as audience characteristics for various media and message costs. This is the first computer-based management system developed for the sole purpose of evaluating publicity efforts. "It evaluates, via a publicity exposure index and a publicity value index, the amount of target audience exposure received and the degree to which planned messages were delivered to the target audience."[62]

Another evaluation system to track publicity results was developed by practitioner Albert J. Barr.

> The microcomputer . . . has revolutionized our entire operation. Data base management, coupled with the media matrices we have developed for clients, provides us with an efficient, low-cost way of tracking our efforts and ensuring that our communication strategies complement those of our clients.[63]

American Telephone & Telegraph public relations specialists use computers to measure readability of company publications with the "Fog Index" or "Flesch Formula," and to analyze the content of press clippings about the company and tabulate the results.

> It [AT&T] wanted to know how many clippings originated from the efforts of company press representatives. It also wanted to know what messages the press relations people actually communicated and the extent to which the messages appearing in the media reflected themes the press relations people were supposed to stress.[64]

American Telephone & Telegraph computers also evaluated whether the clippings were positive, neutral, negative, and how they changed month-to-month.

Computer access to data banks that routinely store the contents of major newspapers and news magazines is a further way used to determine if news releases get published.[65]

Thus, there is substantial evidence that computers have an important role in public relations. Surveys of practitioners also bear this out.

For example, a 1982 readership survey by the Public Relations Journal discovered that 59 percent of those surveyed used computers in their work, and 90 percent said they had a say in the purchase of computing equipment.[66]

Another 1982 survey, this one of the public affairs executives of 160 top American corporations with the purpose of seeing to what extent public affairs/government relations sections of major American corporations had adopted the "new management skill" of computer-based

technology, found

> a large increase in both awareness of the useful role computers can play in support of the public affairs function and the actual use of computer technology since 1975.[67]

In a more recent survey conducted at the 1985 National Conference of the Public Relations Society of America, 83 percent of those surveyed reported they had computers in their organizations, 42 percent had them in their own offices, and 35 percent used computers at home for work.[68]

At this same 1985 conference, there were numerous professional development seminars and round-table discussions on the role of computers in public relations, whereas at earlier conferences there had been virtually no mention of computers.

The field's professional associations also recognize the importance of computers to career development.

In a "Professional Development Guide" published by the Public Relations Society of America, the profession of public relations is divided into four career experience levels, and the publications outlines skills and knowledge appropriate to each level ". . . to provide individuals and chapter professional development chairmen a resource for identifying and planning for learning needs of public relations practitioners."[69]

The guide identifies the following computer-related skills and knowledge:

LEVEL I: BEGINNING PROFESSIONAL

"Preparing to use computers, word processors, and other communications technologies."

LEVEL II: STAFF PROFESSIONAL

"Using computers, word processors, or other appropriate

technologies."

LEVEL III: PROFESSIONAL MANAGER

"Managing use of computers, word processors, and other equipment."

LEVEL IV: SENIOR PROFESSIONAL

"Planning long-range use and management of equipment and technology for department."

The International Association of Business Communicators has a similar career development plan

> . . . developed by senior communication professionals to help isolate the specific skills often required of organizational communicators at various stages of their careers.
>
> . . . if you want to prepare yourself for a future in communication management, you can use the Matrix to determine which of the skills you already have and which ones you'll need to develop to reach your goals.[70]

The IABC career matrix has seven levels of career growth. Level II includes "Use of electronic distribution systems" and "Basic electronic data processing applications" as essential public relations skills. Level III includes "Computers in communication management."

And, according to the profession's leading journal, there is ample opportunity to get involved with computers and associated equipment to enhance one's career development. The Public Relations Journal pointed out

> To an extent unprecedented in technological history, we are being bombarded with new, accessible, and increasingly affordable products whose uses we have yet to understand or accept. Computers have shrunk to lap size and often fit into briefcases . . . software proliferates, offering options and interface capabilities we're not sure we need (though we hate to pass any up, just in case). Database companies call us up, offering us broader and quicker access to a wider and more intricate network of information than we'd ever thought we'd want.[71]

What does the infusion of all this new technology mean for public

relations? According to Betsy Ann Plank, the first woman president of the Public Relations Society of America, computers and related technology will prompt changes in daily work habits, to include:

- Using computers for writing, editing, sending messages and getting information.
- Giving access to databanks "at our fingertips."
- Holding staff meetings, conferring with clients, sharing graphics and conducting nationwide briefings and press events via teleconferencing.
- Using electronic mail and programming daily calendars by computer.
- ". . . employing communications technology to manage the hardware of our business faster, better, more efficiently, more effectively.

And, she wrote, computers will provide "new opportunities for the professional agenda" to include:

- Improvement in research capabilities.
- New delivery systems for messages.
- The ability to customize messages to specific audiences.
- Improved opportunities for the measurement of the effectiveness of public relations performance.
- Instant feedback from audiences.[72]

She concluded:

> while the Information Age and its new technologies will radically change our society, our institutions, our work habits, our individual lives, it can, most assuredly, improve the value and quality of human life in this republic far beyond our present line of vision and imagination . . . The public relations profession is uniquely qualified to be a catalyst, a steward, an architect in that enterprise. Who else, if not we?[73]

In an interview when he left office after 11 years as president of the International Association of Business Communicators, John Baily expressed concern over the need for learning about technology, and issued a warning to his fellow business communicators.

> Not enough practitioners seek to understand the changes going on around them. Technology has revolutionized the way we can do our business. Even more important are the changes in society. The sole ability to write a good news release isn't even barely adequate as credentials for someone in our field today.[74]

"Until the [PR] counselors themselves become computer literate, it is the blind leading the blind," one computer-user wrote.

> Some practitioners will learn to use the computers so that they can improve the quality and quantity of their services. They will gain substantial competitive advantages. Others will be forced to follow, just to stay in the game.
>
> Along with those who profit, there will be those who do not. Some will suffer because they wait too long or refuse to change . . .[75]

In a Public Relations Journal article offering advice to public relations professionals concerned about keeping their jobs in troubled economic times, among the ways "to help your career and your image within the company" was "Use the computer to help you to do your job better."[76]

Another author put it just as bluntly.

> As we grapple with accelerating changes, the tide of technological innovation refuses to be staunched. It now is obvious that public relations practitioners must be "computer literate," and the sooner the better.[77]

"Tips" to professionals for adapting to this "new public relations" and keeping up with the times, according to the Public Relations Journal, include:

- Mastering computerized information systems and finding new ways to use them.
- Learning the strengths and weaknesses of the new communications technology and how it affects media relations and internal communications.[78]

Predictions

Numerous seers have made predictions for the growth of technology

in public relations practice.

According to one source, areas destined for growth are word processing, computer communication over telephone, electronic mail and electronic bulletin boards that allow targeting of messages to specific publics.[79]

Another source predicts that the electronic distribution of releases to the news media, word processing, access to information sources, electronic art design and transmission, electronic distribution of news and information to homes and offices, and use of teleconferencing for intra- and inter-organizational communication will be the areas of most computer use in public relations.[80]

One author singled out the capability of computers coupled with data banks as an extremely important future technique for bypassing media gatekeepers and reaching employees, stockholders and interest groups directly.[81]

The marriage of computers and cable television is a potent force according to another futurist. Computers and cable will allow a computer to target a specific audience and tailor a specific message with great impact.

> Carried to its logical conclusion, such computerized selectivity could be utilized in much the same fashion as computerized direct mail is now used -- a political candidate or furniture salesman might present an individual, taped message for each viewer.[82]

Another prediction is that much public relations in the future will be done at home or in some other decentralized workplace.

> Public relations, like most other fields, rapidly is approaching the day when a practitioner will research an article, speech, or news release in the comfort of her home or office, with instant access to worldwide databases, including those of universities, research organizations, governments and her organization's computerized files.[83]

Another author pointed out that "Today, a very sophisticated public relations operation can be located anywhere in the country -- or the world, for that matter. All a competent practitioner needs is a desk-top computer and a telephone line."[84]

Computers will bring to public relations improved research capabilities, new delivery systems for public relations products, the ability to customize messages to specific audiences, instant feedback from audiences, and measurement of the effectiveness of public relations performance.[85]

A new public relations service called Gambit and marketed by Computer Research Group typifies some of the new uses to which computers will be put in the near future. According to its promoters, Gambit will

- Manage issues.
- Track legislative proposals.
- Monitor regulatory activities.
- Build winning coalitions.
- Identify allies and adversaries.
- Communicate relevant data.
- Coordinate organization-wide positions on issues.
- Evaluate an issue's economic impact.
- Relate financial contributions to issues.
- Budget time, staff and resources in accordance with predetermined priorities.
- Relate the relevancy of activities to strategic goals.[86]

Computers themselves will become far more sophisticated than they are today. "Thinking" computers may perform many public relations tasks that are done by humans today, or not done at all due to their complexity. According to computer science professor Edward Feigenbaum:

> "Thinking" computers will be able to monitor communication, diagnose problems, analyze images, and predict public reactions and attitudes. They will also be able to communicate themselves, translating sound into print and print into sound.[87]

There are more important considerations, though, than just how new tools will be used to do old things. Of concern are the changes that computers will bring about in society and the way people and groups relate to one another.

Audience response TV, instant public opinion polls, immediate access to elected officials and access to a variety of huge information sources will change society, one author contends.[88]

Great message flexibility, instant contact with officials and audiences, interactive video disks, more segmented and specialized audiences, more and quicker feedback from audiences, instant access to files and information sources, and interactivity between audiences and sources of information are considered factors that will do the most to change the nature of the public relations profession in the future according to another author.[89]

Access to vast amounts of information and interaction may be the two most important factors that will affect public relations in the future.

> Computers will allow audiences to become part of the communication process, participating in the organization of messages to fit their own needs . . .
>
> The mass media of the future can offer far greater access to information than is available today. And, if we have more information at our fingertips, we will be able to make more personal choices about the alternatives in our lives and about our lifestyles. The greater the array from which we can choose, the freer we will be as human beings.[90]

According to Dr. Paul Ritt, Vice President and Director of Research for General Telephone and Electronics Laboratories, future public relations practitioners must know the limits of computers, they must know impact areas in all segments of society, and they must become familiar with the fear-causing attributes of new technology.[91]

Another seer wrote: "The fact is that computer capabilities do much more than improve the speed and efficiency with which we complete familiar but important tasks. They provide the power to do things we could never do before.[92]

New technology means greater interdependence, more mutual dependence among the organizations, institutions and people of our society. More dependence means more need for effective communication and more need for effective public relations. Computers and other new technology will make public relations more important, and effective communication more imperative.

Another writer predicted that computers will become as commonplace as "the old typewriter and telephone," and optimistically wrote that

> The public relations professional will differ from others in keeping alert to the dangers and pitfalls of mere gadgetry and looking for ways of using these new tools to improve understanding between individuals and institutions.[93]

Others pointed out that we have entered "a new age of information and communications" and must change or else.

> The focus of this new age . . . is the very currency of public relations. The information age is replacing the cold cash of hard copy with electronic impulses, reaching more people, more quickly with more information than ever before . . . . technology is transforming the way we send, receive and process information . . . there is not a single medium of communication unaffected. And, the information processing devices and communication links we now have are merely the advance guard of the wired society to come, when we will harvest the fruits of the information age . . . . As a result, public relations must adapt accordingly. If we persist in time-worn ways of gathering and disseminating information, we may go the way of blacksmiths and icemen.
>
> Computers will be everywhere in the information age.
>
> The impact of the information age won't be confined to big corporations with mainframe computers to feed. In the wired society everyone will be plugged in, from householder to small businessman, from student to scholar, from journalist to consumer. We are going to see computers on every desk and in every home.[94]

Others who look to the future report that public relations practitioners will have to change traditional ways of doing things in order to keep up with changes in society and in technology.

> . . . the popularity of computers is on the rise. Society's reliance on computer systems to perform numerous tasks and to provide an increasing number of services suggests that public relations will have to tailor traditional techniques to adjust to the new technology if the profession is to keep pace with other segments of society.[95]

Knowledge of new technology and of computers will be essential to successful public relations practice in the future, many authors write. "Without a supply of professionals conversant with the the new technology and its uses, we can scarcely hope to have an impact on a world where it is of paramount importance."[96]

Put even more bluntly by two writers concerned about the future role of public relations in the "wired society:"

> Managers, marketers and accountants within corporations make daily use of communications technology. How much respect can a public relations practitioner, whose work is communications, expect from them if he or she refuses to take advantage of the very advances that could transform the PR function?[97]

A corporate vice president for external relations concurs.[98] "Public relations people are always agonizing over their inability to be a part of top management, but they don't do enough things to make themselves a part of top management."

Philip Lesly, public relations practitioner, in a speech on the future of public relations given as part of The Vern C. Schranz Distinguished Lectureship in Public Relations program, summarized the situation well:

> All of this [technology] has monumental importance for public relations. The nature of the publics we must deal with . . . the extent of the influences affecting the human climate . . . the number and nature of the channels we can use . . . the principles of communication and persuasion . . . the relationships with

> governments, clients, media . . . all of these are being transformed rapidly. Only by being alert to developments and, even more important, by analyzing the currents and implications of what is happening can a public relations professional keep abreast of the new needs.[99]
>
> Even so . . .
>
> No matter how far we progress toward sophisticated management development or toward utilization of modern technological tools, ours will always be a "people" business.[100]

Keeping Up With Technology

General

How do professionals acquire the training in computers that they need now and in the future?

Professional association career development programs would be one source of training. Another would be "on-the-job" training in the practitioner's organization. In fact, American businesses spent about $1 billion during 1986 for computer literacy training for their employees.[101]

The Public Relations Society of America initiated in 1985 a New Technology Professional Interest Section to "help section members understand and keep up with technology and communications advancements in the industries they serve."[102] Section members receive a periodic newsletter distributed electronically and participate in computer on-line meetings.

A newsletter, Video Monitor, began publication in 1985 to report on computer, video and high technology news and developments of interest to marketing, advertising and public relations professionals.[103]

Another way, of course, is to include instruction on computer use in colleges and universities that prepare young people for careers in

public relations and related fields.

Computers in Business Education

Public relations practitioners work for and with men and women who hold degrees in business, perhaps more than with people who hold degrees in any other field. It is important that these two groups speak the same language and work well together. As authors Nager and Allen wrote,

> A new period of significance has arrived for the public relations profession. To a degree never seen before, executives are looking to public relations professionals to become full members of the management team. With this comes an expectation to provide research, planning, communication, follow-through, counsel and other managerial skills at higher levels.[104]

It may be difficult for public relations practitioners to get on the "management team," though. There is, among other things, an "education gap." Marketing professors Kotler and Mindak point out:

> Public relations people receive their training for the most part in schools of journalism which equip them to spell but hardly to understand economics and take a management point of view. . . Thus, there is a serious education gap.[105]

Students of business generally receive extensive instruction on the use and role of computers, and there is much concern about providing adequate education to prepare business majors for a professional life that makes heavy use of computers. "Computers are the basis of our industry. This change from an industrial to an information society is creating a crisis for educators," wrote several business teachers.[106]

Business education has included instruction on computers since the early 1960s[107] and the recommendation of the National Commission on Excellence in Education that "students should be equipped with the knowledge to understand the computer as an information, computation ,

and communication device; that they should use the computer for personal and work-related tasks; and that they should understand the world of computer, electronics and related technologies" has been taken seriously.[108]

The relationship between business and education that prepares people for business is understood by those in business, and there is an understanding of a need for action. One business futurist wrote:

> The successful implementation of technology and education -- the components of change -- demands an ability to forecast and act, rather than prophesizing by a crystal ball or book.[109]

The public relations committee of the National Business Education Association issued a statement concerning the role of business education in "the imperative for educational reform" that calls for business students to be computer literate and to understand management information systems. Plus, the committee wrote,

> Currently, the computer with all its present and potential uses is an accepted fact in business and society as a whole. Computer-related instruction -- a natural aspect of business education -- must then be emphasized in our public educational programs.[110]

Business educators do not teach the computer as a sophisticated typewriter or as a tool for specific functions. Their approach is to view the computer as a comprehensive system.

> To properly orient students to thinking about the computer as a tool, teachers should be teaching about the computer from an integrative viewpoint. They should also be teaching about the computer from an understanding viewpoint -- a viewpoint intended to help students conceptualize how the diverse applications of this particular tool can best be used.[111]

Business educators have long sought to give students "hands on" experience with computers in the classroom. They perceive great benefit from this, as opposed to merely learning about computers from textbooks. With computers in the classroom,

> students become more comfortable with microcomputer technology. They become familiar with microcomputer terminology and learn to operate microcomputers and peripheral devices. Through this exposure, they may increase their conceptual understanding of the operation of a microcomputer configuration. In so doing, a reduction in computer mystique may result. The capability and limitations of microcomputers and the importance of man to the operation of the machine become more evident to the student.[112]

What business students need to know about computers to meet the demands of "the office of the future," according to one business educator, is

- The ability to speak the language of technology and have an understanding.
- A broad understanding of technological capabilities.
- A basic understanding of how technology can be applied to problems.[113]

Another educator, pointing out that computers have "clearly defined a strong, interdependence" among users, stressed that corporate departments can no longer function in isolation. An integrated curriculum is called for.[114]

To summarize the apparent attitude of business educators toward computers:

> With microcomputers becoming more readily available and the forecast of a growing need for a computer literate society, business education teachers should be ready and willing to accept the challenge of preparing students for the information age.[115]

Computers in Journalism Education

Similar to business education, there is an understanding in journalism education of the need for instruction on computers. Indeed, it is the changing nature of the real-world communications function that is adding instruction on computers to journalism education.

> As the paper trail of government and business decision-making changes to an electronic trail, successful journalists must be able to negotiate and maneuver skillfully in computer-based information banks.[116]

Another journalism educator wrote:

> And with computers becoming more and more a part of the news scene, with pagination, telephone access to newspaper computers being tested nationally, computers becoming an integral part of classified, and two-interactive cable TV well-tested in several markets, the journalism student needs to understand the role and operation of computers.[117]

Indeed, computers are used extensively in the field of journalism and their use is growing rapidly.

> There are today . . . more computers in use at daily newspapers in the United States (more than 2,000) than there are daily newspapers in the United States (just under 1,800). Ten years ago there was not a VDT [video display terminal] to be seen in a newspaper office. Today, there are more than 20,000.[118]

Richard Weiner, writing in the Public Relations Journal pointed out to public relations practitioners that journalism was adapting the computer to its use, and might even be ahead of public relations in that regard.

> Just as it has changed our business and personal lives, the computer is transforming journalism, news gathering and dissemination, media production and press relations . . . . For many years, the use of computers by the media, particularly daily newspapers, has been far ahead of the public relations field . . . the major wire services are computerized, and most of America's leading radio and television stations are integrating computers into their news operations.[119]

In its journalism sequence, the University of Minnesota has developed an "Information for Mass Communications" course that introduces students to the uses of computers in journalism. Using two computer simulation games, the course helps students apply the concepts of information searching as a process, specific techniques of information gathering and various ways of evaluating information.[120]

Game #1: "Information Search for Journalists," asks students to do

research for a TV documentary. Students work with both the principles of the search process and with particular information sources.

Game #2: "Evaluating Information for Mass Communications," asks students to select appropriate specialists to testify on a controversial topic. They evaluate information and expertise by standards such as recency, relevancy, reputation, sufficiency, internal and external consistency, comparative quality and statistical validity.

A new program is underway at Rutgers University that brings together communication, library and information studies, and journalism into one school -- with heavy emphasis on the application of computers.

> At a generic level, we discovered that each of us in our disciplines was about the process of collecting, processing, organizing, managing, disseminating and assessing the impact of information. Those central functions, coupled with rapidly developing technology, pushed us to think of things not as they are and how they might be altered to accommodate these change, but as they seemed to be emerging and were likely to appear in the future.[121]

An issue of Journalism Educator devoted to journalism education for the 21st century, pointed out that

> journalism education is making more and more use of audiovisual and computerized instruction as well as courses in information retrieval and use of data bases in classes. Most journalism schools use video-display terminals or microcomputers in some way.[122]

The author predicted that

> In journalism and mass communications curricula, more emphasis will be placed on research and on ways to use new technologies to increase excellence in reporting, editing, photojournalism, advertising, broadcast journalism, graphics, public relations and all parts of what we broadly define as mass communication.[123]

Similarly, a booklet produced by the Journalism Education Committee of the Associated Press Managing Editors Association dealing with journalism education in the 1990s queried many professionals and journalists concerning "futuristic" subjects that might be part of journalism curriculum by 1990. For example:

> Technology is going to become more important. Technological changes are going to come much more rapidly and you have to keep up with that. (Educator)
>
> The students need a broad understanding of what we know at this point about all of the technologies and how the public reacts to them. (Editor)
>
> We are starting to build familiarity with a computerized information system into the curriculum of the school. (Educator)
>
> This is an extremely rapidly changing field. It has to do with electronics and computers. That's where the principal change is taking place and whatever journalism schools can do, they must do to help the entry level students master the necessary skills. (Educator)
>
> Students will need to know a lot more about computers. They will need to be a whole lot more sophisticated about electronics. (Editor)
>
> I think some basic theoretical and hands-on understanding of computers, what they can do and how we make them do things, is necessary. (Editor)
>
> I think that students ought to be literate with computers. I think we are going to see this more and more. It is going to be a part of the general education. (Educator)
>
> Clearly the computer is going to be a central notion, really from now on. (Editor)
>
> I think that we recognize that our graduates are going to have to be computer literate. This may well become an important requirement of the journalist of the 1990s, to be fully conversant with the use of data handling through computers. (Educator)[124]

Despite this apparent interest in computers by journalism professionals and educators, one 1985 study of 266 newspaper editors failed to show anything dealing with computers as a desirable elective course for college journalism majors.[125] The report of the study, however, did not indicate whether a computer course was among the choices offered to the survey subjects.

Most public relations students receive a portion of their education in schools of journalism and thus benefit from instruction on computers provided in journalism courses. Such instruction is, of course,

valuable, but it is not tailored to public relations.

Computers in Public Relations Education

There seems to be much uncertainty about the need for instruction on computers in education for public relations. At one extreme, there are those who insist it must be included. At the other extreme, there are those who apparently see no need for such instruction. And, there are many in the middle.

A 1982 survey of 267 members of the Public Relations Society of America and 213 members of the International Association of Business Communicators included questions about undergraduate courses for public relations majors. Computer use and related technologies were not among those listed as being important, although parliamentary procedure and public administration made the list.[126]

An undated pamphlet, "Careers in Public Relations," issued by the Public Relations Society of America made no mention in its sections on "Academic Preparation" and "Personal Qualifications and Preparation" of education in technology to meet the needs of the profession.

Albert Walker's 1981 study of public relations education in the United States did not mention any technology instruction, either as something being done or as something that should be done.[127]

A 1983 update of Walker's report also failed to mention instruction on computers or technology as part of public relations education.[128]

A model for contemporary public relations education developed by the Association for Education in Journalism & Mass Communications and the Public Relations Society of America had as its goals to

> examine the requirements for the professional practice of public relations . . . and to relate these requirements to educational

> standards, and to issue recommendations concerning the manner in which education . . . may be improved, not only to meet the needs of the profession but also to effect ultimate improvement in the professional practice itself.[129]

The study made no mention of education to meet the demands of technology except to point out the need for learning how to write for electronic media and to suggest courses in science and engineering for practitioners who might work in industries where translating technical information into layman's terms would be necessary.

A 1981 re-examination of the 1975 model, prompted in part by a 30 percent increase in the number of public relations majors since 1975 and in part by doubts that the 1975 program "was fulfilling the needs of record numbers of students, and of one of the most rapidly changing professions in American society" made no mention of technology.[130]

A 1982 pamphlet issued by the Public Relations Society of America, "Where to Study Public Relations . . ." discussed the 1975 model for public relations education but added computer science as a course "in a field related to the special area of public relations interest."[131]

A report that same year in the International Association of Business Communicators News pointed out that

> It's important for students to develop strong written and verbal communication skills, and to build a solid foundation in the humanities, social sciences, group dynamics and, on the business side, basics of economics, marketing and computer sciences.[132]

Still another 1982 survey of 250 educators and professionals sought to answer the question, "As the profession moves into the decade of the '80s, what changes in the education and training of future professionals will be required to meet the new demands of society and the work environment?" and had as its purpose

> to assist in the generation of such answers through a systematic data-based analysis of future educational needs and goals for

potential use in planning and developing further improvement in public relations education at the university level nationwide.[133]

Of those educators and practitioners surveyed, 95 percent said public relations students should take more business courses; the trend, the study concluded, was toward greater emphasis on business, research and management skills. Using a scale of 1 to 5 to rank areas in public relations education where greater emphasis was needed, with 5 meaning more emphasis was needed, the study reported the following:

Subject Area	Mean Ranking
Basic Writing and English	4.38
Management Skills	4.12
Research Techniques	3.87
Electronic Media	3.73
New Technology	3.58
Internal Communication	3.41

A 1983 survey, this one of members of the Communication Section of the American Society of Association Executives, a group representing 150 business and professional associations in the United States, asked for college subjects that entry-level public relations practitioners should study to meet the needs of the profession. "Computer Basics" was listed among the top 16 courses.[134]

A "systems approach" to public relations education included the computer as an essential analytical tool for public relations students, pointing out that "acquisition of analytical skills is part of a necessary curriculum model."[135]

Public relations professionals surveyed in 1985 by public relations students at Marquette University ranked "computer usage" ninth in a list of courses recommended for public relations students.[136]

A new study of public relations education was inaugurated in 1984, and the Commission on Undergraduate Public Relations Education was given

the task of seeking the answer to: "What should undergraduates study to equip themselves for an entry level job and for a lifetime of development in a changing profession?"[137]

A five-page survey issued by the commission in May 1985 sought answers from educators and practitioners to that question. Pointing out that "educators must not only prepare students for their first jobs in public relations, but also for a lifetime career of professional growth and performance and service to society, computers were listed several places in the questionnaire.[138]

- Under a "listing of courses taken by a typical public relations student prior to and concurrent with work in a professional program.

- Under a list of minors "as a means of providing students with strength in a second area and especially in areas related to a career in public relations . . ."

- Under a list of key business courses, noting that "The majority of public relations students minor in business."

- As part of a list of possible topics to be included in professional programs, under "New PR Tools and Techniques."

While the commission's report is not due until sometime in 1987, a preliminary report appeared in the PR Reporter of February 1986. The article noted that 1500 practitioners and educators took part in the survey and, compared to earlier studies of public relations education, this survey showed a shift in emphasis toward management, research, accountability and technology. The article listed 17 essential courses closely grouped at the top of a list of 124 possible college courses.

Instruction on computers was not listed among the 17.[139]

Some schools, however, have added technology to their public

relations studies. The University of Miami's School of Communications, for one, has a "high-tech center" to introduce students to the role of technology in the profession.

> Students are no longer caught in the typical Catch-22 situation of needing experience to get a job, but needing a job to gain experience. They can step into the field because they have the experience and are familiar with the technology.[140]

The author pointed out that "Public relations educators are working to strike a new balance by embracing new technologies and research methods" but that adding technology to public relations education is mostly a function of adequate budget. Those schools without adequate funds, she wrote, are suggesting ways students can get acquainted with computers outside of the classroom.[141]

Studies concerning the content of graduate study for public relations students have been less reluctant to discuss the need for instruction on computer use and on technology in general. The Report of the National Commission on Graduate Study in Public Relations recommended graduate education focus on basic skills in management and decision making, as well as advanced skills in writing and communication. It suggested graduate students study at least three semester hours of

> Advanced programming and writing as well as production, as these procedures relate to contemporary media (for example, commercial or in-house radio, television and cable systems, electronic mail, direct broadcast satellites, electronic newspapers, teleconferencing). Given the technology of information delivery, which accelerates at an alarming pace, graduate program planners may want to expand this segment into two courses.[142]

The study emphasized that public relations graduate students should become competent in the use of certain research tools and included computer use among them.

Another report on recommended graduate education emphasized that

the program should "have a strong emphasis on preparing future practitioners for a powerful role in management"[143] and included eight quarter hours of computer science plus it recommended students complete a 12-credit hour option in a related field. Computer science was identified as one of the related fields.

Technology in Perspective

While the narrow focus of this report is on computer use instruction in public relations education, technology in higher education generally and in public relations education in particular should be viewed in its proper perspective.

Education in general is intended to help people "increase their intellectual, social, personal, and moral potentials."

> It prepares them for productive activity. It opens their minds to alternative ways of thinking and living . . . .it provides a foundation for making judgments, for determining personal and cultural values, for choosing appropriate courses of action . . . The work of education is to make a positive difference in people's lives and also to change society, over time, through the works of those it educates.[144]

Education, therefore, has among its purposes the satisfaction of individual as well as societal needs.

On an individual level, it aids a person in understanding himself and the world around him and in realizing his full potential. And, one of the purposes of undergraduate education is to help the individual find suitable employment.[145]

On a societal level, education aids in providing effective leaders and informed citizens who will participate in cultural advancement, appreciate the interdependence of human beings and nature, and who are models of moral and ethical integrity. One of society's needs to be met

by education is its economic well-being and the requirement for

> able and imaginative man and women for the direction and operation of its institutions (broadly defined), for the production of goods and services, and for the management of its fiscal affairs.[146]

Instruction in technology is a way of helping education meet these individual and societal needs. As Ernest L. Boyer, President of the Carnegie Foundation for the Advancement of Teaching, wrote in 1984 of the challenges facing education, "Technology must be linked to educational objectives. Technology must also be linked to human needs and goals."[147]

Technology must be "humanized," educators John W. Murphy and John T. Pardeck wrote in the Journal of Education. To make education more socially responsible, they wrote, educators should deal more with ethical behavior and social relationships than mere technology. "Don't discuss technology in terms of techniques, but in terms of the relationship to human destiny."[148]

There is concern among professionals about the emphasis on technology at the expense of the humanities. Betsy Ann Plank, the first woman president of the Public Relations Society of America, wrote:

> I am concerned about education, which is being whipsawed by the strident demand to educate for computer literacy and the long-term urgency to maintain emphasis on the humanities. One priority is driven by the needs of technology and new job skills. But equally important -- perhaps more so -- will be our need to produce generalists who have the broad perspective for decision-making and judgment.[149]

John Wicklein, Associate Director for News and Public Affairs, Corporation for Public Broadcasting, expressed similar concern in an article for public relations professionals:

> Will the new technology, by its very nature, manipulate us? Will governments and corporations be able to use it to manipulate us, or will we be able to manipulate the new technologies to serve the good of society?[150]

Practitioner Don Bates cautioned that while veteran practitioners see great promise in computers and other new technologies,

> They temper excitement with caution. New technologies, they say, are fraught with problems for practitioners -- ethical and philosophical problems in particular. If we don't understand the role and limitations of technologies, the result will be misleading, misdirected communications that will raise costs. Obviously, public relations' credibility won't fair too well in that context.[151]

Douglas Cater, writing in the Journal of Communication on values in an information society, pointed out that

> One can grow morbidly concerned about the prospects of a society capable of prodigious feats of accumulating, storing, and transmitting information but incapable of organizing it in ways necessary for society's survival.[152]

Still, general education and instruction on computer use should not be viewed as mutually exclusive. Instruction on technology should not be viewed as an end in itself; the value of such instruction lies in its integration into the whole curriculum. Technology is used to achieve some goal; it is method, technique and process -- not the product.

To the extent that technology is a part of this world and the one to come, it has a role in higher education, and instruction on computer use should not be viewed as "skill training" separate from education overall.

Addressing this issue in 1983, Donald J. Senese, Assistant Secretary for Educational Research and Improvement, U. S. Education Department, spoke of the "new liberal arts" in higher education:[153]

> The "new liberal arts" require a knowledge of "technology" and "analytic skills." For the teacher in any field, as well as the poet, the artist and the philosopher, live in a world in which they must deal with data during the dawning of an "information society."
>
> It is not the existence of technology which makes instruction on

computer use important to public relations education, but the potential application of technology to improving society and the relationship among society's institutions. Public relations practitioners must learn to use the technology rather than be used by it.

> . . . we can't become so engrossed by the capabilities of the machines that we become their servants. If we let that happen, the vision so engrossed by the capabilities of the machines that we become their servants. If we let that happen, the visionary future in which PR is carried out by computers looms before us like a scene from a gloomy Russian novel. . . .
>
> As communication experts, we are the ones who can make this exciting future a reality. It will take more than technology. It will take the ability to use technology meaningfully and effectively. We know what it will require, and what the rewards are. Now is the time to get ready for the undertaking.[154]

Computers should be viewed as tools, aids in doing old tasks in new faster, more efficient, more cost effective ways, and in doing new tasks that were previously impractical or nonexistent. But the computer is not a tool in the sense of a typewriter. Using a computer is not a subfunction of public relations, but a computer is an instrument for accomplishing a function, achieving a goal for the betterment of society -- better, faster and at less cost. A computer is an extension of a person's creative mind, an

> integration of the person and the tool into a unique combination . . . [it is] more than a productivity engine. It is on the way to becoming a responsible servant.
>
> . . . computers have become our friends -- they teach us, they help us work harder and smarter, they do much of our time-consuming and dangerous work for us, they open up the world to us, they liberate us . . . as no previous tool of man ever has.[155]

Public relations is a problem-solving function, according to educators Cutlip, Center and Broom: "In its mature form, public relations is a scientifically managed function seen by practitioners, and by others, as part of the organization's problem-solving process."[156]

Computers aid public relations problem-solving in the research, planning, action and communication, and evaluation phases of the public relations cycle. Isaac Asimov wrote:[157] "We are reaching the stage where the problems that we must solve are going to become insoluble without computers. I do not fear computers. I fear the lack of them."

New technology is changing public relations and the society in which it functions. Public relations practitioners must understand the new technology, must be alert to the changes in society technology is producing, and they must know how to use the new technology in dealing with these changes. But a working knowledge of computers is not enough; facing up to the challenges means being able to use the technology well and for society's benefit. Use of computers

> demands a new sense of motivation by those involved in the communication business, not simply to achieve greater efficiencies for higher profits, but to perform a service heavily weighted with the public interest.[158]

In a speech at the 35th National Conference of the Public Relations Society of America, Betsy Ann Plank concluded that

> . . . while technology will radically change society, it can improve the quality of life; and that the public relations profession is 'uniquely qualified' to be a catalyst in that change.[159]

Teaching Technology

There is some discussion in the literature concerning what instruction on computer use should consist of for non-computer science majors, and concerning the qualifications and willingness of faculty to provide such instruction.

"Computer literacy" is a difficult term to define, and, as business educator Jerry Pournelle pointed out, "I've never met anyone who can

tell me what 'computer literacy' means, but we're willing to spend whatever it takes to get it."[160]

What is needed in instruction on computer use is not merely those basic skills necessary to operate the equipment, but "an awareness and openness about present and future applications of computers to specific job settings"[161] without ignoring the social, political, economic and ethical implications of technology's use.

The Policies Commission for Business Economic Education in 1984 issued a statement about what instruction on computer use should include. Besides basic skills, the commission said a computer literate person should

- Understand the computer's capabilities and limitations.
- Demonstrate a fundamental knowledge of computers and their effects on society.
- Use the computer as a tool for solving problems.
- Understand how computers can improve decision-making.[162]

Another policy statement, this one by the National Business Education Association, indicated that in addition to skills, students of computer use should be able to:

- Describe the impact of computer technology on industry, business, government and the individual.
- Identify current trends and issues dealing with computer technology.
- Recognize how computers may be used as management tools.[163]

Priorities in computer education, according to the Carnegie Foundation for the Advancement of Teaching are: (1) learning about computers -- about the technological revolution of which computers are a part, (2) learning with computers -- using computers as tools to accomplish other tasks such as writing, researching, etc., and (3)

learning from computers -- human-machine interaction.[164]

What is needed in public relations education is not unrelated courses in technology and in the humanities, but an integrated, complementary curriculum.

> The main lesson . . . is to not simply accelerate changes in our communications techniques to conform to "electronic style" but to start fresh with a holistic approach to public relations and communications in a technologically advanced world.[165]

Whether American college and university faculty are up to the task of providing adequate instruction on the role and impact of computers is another matter. Business educator Ralph Ruby, Jr., pointed out, "Alas, microcomputers are much easier to mass-produce than computer literate teachers."[166]

Many see the advent of computers as nothing more important than "the appearance of a few electronic toys,"[167] and are reluctant to admit that major changes in society, in the way people and institutions relate to one another, and in education are taking place at a rapid pace.

Educators Durback and Sadnytzky wrote of faculty computer illiteracy as the "hidden crisis" in education, and stated "It is no exaggeration to say that most of the nation's college faculty is disfunctionally computer illiterate."

> Yet, at the heart of this crisis is a faculty that is unable to use a computer. At most colleges, the level of computer usage and computer literacy, on the part of the teaching staff is quite low, with the range high represented by engineering and business faculty, while the low range is found in the arts, social sciences and education departments . . .[168]

They went on to write that the challenge lies in "educating the faculty in the myriad of possible computer applications and in offering them the opportunity to utilize these applications."[169]

"Cyberphobia" is a fear of computers. Educator Robert M. Francis

wrote: "Implementing microtechnology in the classroom at all educational levels is inevitable . . . convincing the cyberphobics that there is little to fear, however, may be a more awesome task."[170]

Faculty resistance to including instruction on computer use in higher education may, among other things, be prompted by:

- Reluctance to acknowledge an inability to use the new technology.
- Failure to understand how new technology can be merged with a faculty member's background.
- Failure to understand how teaching methodologies must change.
- Fear of being displaced by new technology.
- Belief that computers are a passing fad.[171]

A study by public relations educator Hugh M. Culbertson showed a relationship between emphasis in public relations education and prior professional experience of the educator. More years of professional experience, he found, increased the chances that an educator had been in a management position, and thus emphasis as an educator would be on management, decision-making, ethics and similar topics. Less professional experience would tend to produce less of a management orientation when the professional moved into education.[172]

While Culbertson did not address the role of technology in education, one may hypothesize that professional experience with computers may well affect an ability and willingness to include instruction on technology when professionals move into academe.

Education that includes instruction on the use of computers and other new technology to meet individual and societal needs may well be essential in this information age. Futurist Frederick Williams summed it up:

A number of contemporary critics fault our educational institutions

> with too much of a preoccupation with the past, both in operating style and in curriculum. Our schools are locked into an early twentieth-century version of an industrial society that is already taking on the characteristics of a new age. We are not using the one best institution [education] we have for adapting to rapid change.[173]

Finally, ". . . those institutions which fail to adopt the new technology will be, except for selected cases, preparing students who will be essentially underemployable."[174]

Conclusion

If public relations education is to fulfill its responsibilities in meeting the needs of the profession, there needs to be a close relationship between educators and professionals. Education must be responsive to the needs of the profession today and expected needs of the profession tomorrow. There is a clear need for instruction on communications technology in public relations education. One study of public relations educational needs emphasized that

> Today, changes in communications technology, the increased international interdependence of industry and government, and the necessity of specialization in the public relations field itself are increasing the educational diversity required to adequately prepare tomorrow's public relations professionals.[175]

There are some doubts about whether education is meeting the need for the profession of public relations in the information age.

> Are we ready for it? More importantly, will the generation of PR practitioners that succeeds ours be ready for this new world of communication?
>
> As people who manage and disseminate information, we should be in the vanguard of the information revolution. To play our role in the transformation of our jobs, we must keep up with the technology. This will require technological training -- and that training is not now widely available to us.
>
> The university seems unaware of the enormous effect this revolution is having on PR, and students in the field are getting no exposure at all to the new technologies.

> No practicing public relations professional would want to be dropped into the world of 1985 communications technology prepared only for 1955-style notebook and typewriter journalism. Yet, that is exactly what will happen to PR students now in the universities.[176]

The 1975 "Design for Public Relations Education" summarized well the present situation in public relations education:

> If the needs for public relations leaders for tomorrow are to be met, if public relations practice is to move further in the direction of professionalization, the educational process must be strengthened and standardized within flexible limits . . .[177]

Finally,

> The Information Age will bring forth profound societal change in the next decade. Consequently, public relations professionals are faced with an upheaval no less dramatic than that experienced by the calligrapher in Gutenberg's era. The task will be to anticipate the future and prepare to use it, or perish.[178]

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CHAPTER III

METHODOLOGY

General

A study was conducted to gather information concerning computer instruction in public relations education.

The population for the study was those four-year educational institutions in the United States which have public relations programs, sequences, or emphases. That is, the study included those institutions which claim to have a program of instruction to qualify students for entry into public relations practice. Institutions which merely have elective courses in public relations were not included. Since there are only 179 such institutions, the entire population was used for the study; no sample was taken.

A questionnaire and cover letter were mailed to the institutions, asking that the questionnaire be completed by the person most knowledgeable about public relations education.

Information was gathered on the present content of public relations education with respect to instruction on computers, and intentions for the near future.

Information also was gathered on the computer background and experience of the instructors, as well as on instructor attitudes toward including instruction on computers in the public relations curriculum, and on the perceived value of such instruction as an aid to graduates in

obtaining suitable employment. Information concerning obstacles to including such instruction in the curriculum was also obtained.

Information also was gathered on teaching techniques used to impart information about the role of computers in public relations.

As a part of this study but using a separate survey instrument, 24 members of the Oklahoma City and Tulsa, Oklahoma, chapters of the Public Relations Society of America were asked to rate types of entry-level employment obtained by recent public relations graduates of the institutions participating in the study. The chapter members were selected on the basis of their extensive and varied experience.

The Population

Appendix A lists the 179 four-year colleges and universities in the United States which, according to the 1986 directory of the Association for Education in Journalism and Mass Communications, offer sequences, programs, program specialties or emphases in public relations, public information or corporate communications.[1] Schools are listed alphabetically by state, and alphabetically within states.

All 179 institutions were the survey population for this study.

Accredited Public Relations Sequences

Of these public relations sequences, 34 are accredited by the Accrediting Council on Education in Journalism and Mass Communications[2]. Accreditation means that

> a program or program specialty has been evaluated by educators, media and industry professionals and that the program or program specialty has passed a thorough examination. It also means that the school has undergone a penetrating self-study which emphasized attention to innovative educational and training techniques.[3]

For educational programs examined by the Accrediting Council on Education in Journalism and Mass Communications in 1985 or earlier, individual sequences in a journalism department or school received accreditation. Programs examined after 1985 do not by themselves receive accreditation. Instead, the overall administrative unit of which the public relations program is a part is accredited. Dates and method of accreditation were not considered important to this study.

Despite the relatively small number of accredited programs, this is considered an important variable because accreditation means that a school has undergone self-study and its program has been carefully evaluated by public relations professionals and external educators. Accredited programs, one may assume, should be more consistent with and responsive to the needs of the public relations profession. The presence -- or absence -- of instruction on computers in accredited public relations programs as compared to non-accredited programs is important information.

It should be understood, however, that public relations programs which are not accredited are not necessarily lower in quality than accredited programs. There are a variety of reasons why a school may not seek accreditation, or may have failed or lost accreditation. All that can be said is that those programs which are accredited have undergone a measure of self-study and external evaluation, while non-accredited programs have not.

The Survey Instrument

The survey instrument was a mail questionnaire forwarded by cover letter to the department heads or comparable administrators of the 179

public relations programs at the institutions in the study population.

The material was mailed to the department head or comparable administrator of the academic unit which contains the public relations program, instead of to the individual coordinating or conducting public relations education.

Some of the institutions in the population have heads or coordinators of the public relations programs, others do not. In some cases, coordinators of the public relations programs also coordinate related programs, such as advertising. In some cases, the public relations programs are located in mass communications or speech departments.

There is great variety in titles and organization, and the Journalism Directory used as the source for the study population does not go into great detail concerning the internal organization of the departments and units. Thus, sending the survey to the administrator of the unit that houses the public relations program appeared to be the most feasible procedure.

To avoid possible misrouting of the survey instrument, the questionnaire was mailed to the person listed in the Journalism Directory as the chief administrator of the unit in which the public relations program is housed. The cover letter requested that the questionnaire be given to the faculty member best qualified to answer the questions. The survey asked for the title of the respondent.

Content of Cover Letter

The cover letter contained the following information:

a. The letter forwards a questionnaire that asks for information

on the content of public relations education at that institution.

b. The survey is part of a doctoral dissertation concerned with public relations education.

c. The survey is concerned with instruction on computers that is included in education for public relations majors at that institution.

d. The survey should be forwarded to and completed by the faculty person most knowledgeable about content of public relations courses and content of other courses required of public relations majors.

e. Cooperation is urged. Failure to complete and return the survey within a reasonable period of time will detract from the value of the study to public relations educators.

f. The survey should be returned within 14 days in the addressed, postage-paid envelope included with the survey.

g. A copy of the summarized findings of the survey will be sent to participants who request a copy.

h. All data will be reported in compiled form. The data reported by a participating institution will not be revealed as coming from that institution; anonymity will be assured. The code number on the survey is for keeping track of responses, and will be removed upon receipt of the completed survey.

i. Questions about the survey should be referred to: Professor Charles A. Fleming, School of Journalism & Broadcasting, Oklahoma State University, Stillwater, Oklahoma 74078-0195; (405) 624-6354.

A copy of the cover letter is contained in Appendix C.

Content of the Questionnaire

A copy of the questionnaire is contained in Appendix F.

The questionnaire was organized into the following sections:

Section I: General Information

Section II: Information on Computer Instruction in Public Relations Education

Section III: Likert Scale Statements

Section I: General Information.

a. Code number. This information was necessary to keep track of the responses and to initiate followup mailings where necessary. When a completed survey was received, the code number was removed to assure anonymity to the participants.

b. Whether the public relations program is accredited by the Accrediting Council on Education in Journalism and Mass Communications. This information was necessary to make a comparison between accredited and non-accredited programs. While the Journalism Directory identifies programs that are accredited, its information was a year old by the time this study was done, and other programs may have become accredited or others may have lost accreditation.

c. Number of public relations majors, graduate and undergraduate. This information was necessary to describe the public relations programs under study.

d. Number of part time and full time faculty teaching in the public relations program. This information was necessary to describe the public relations programs under study.

Note: For the remaining topics in Section I, individual answer sheets were included with the survey so that the person answering the survey did not have to interview other faculty members to obtain the desired information. The person receiving the survey needed only to

pass out individual answer sheets to other faculty members, collect them when completed, and return them all together. This procedure reduced the burden on the person completing the primary survey.

e. Number of years of professional public relations experience and of teaching experience for part time and full time faculty members in public relations program. This information was necessary to describe the public relations programs under study.

f. Whether faculty members in the public relations program own or use personal computers. This information was necessary to make a comparison between faculty members' experience with computers for accredited and non-accredited programs.

g. Whether faculty members in the public relations program used personal computers during their professional public relations experience. This information was necessary to make a comparison between faculty members' experience with computers for accredited and non-accredited programs.

h. Whether faculty members in the public relations program have ever had formal instruction on computers. This information was necessary to make a comparison between faculty members' experience with computers for accredited and non-accredited programs.

Section II: Information on Computer Instruction in Public Relations Education. Responses to these items aided in determining the opportunity public relations majors had to learn about and interact with computers, and the nature and extent of such learning.

a. Whether public relations majors are required to take a basic journalism reporting course that includes using word processing equipment.

b. Identification of public relations courses required of public relations majors.

c. Whether public relations majors are required to take a computer science course. Name and department of the course.

d. Whether public relations majors have a computer science course as an elective. Name and department of the course.

e. Whether the role of computers in public relations practice is included in any other required or elective courses for public relations majors. If so, in what courses, and to what extent.

f. How instruction on computers is included in public relations courses. (Lecture, demonstration, application, etc.)

g. Whether hands-on experience is included in instruction on computers for public relations majors.

h. Whether there is any other opportunity for public relations majors to interact with computers as part of their education at that institution.

i. Whether there is an opportunity through internships for students to interact with computers.

j. The types of positions and organizations where the institution's most recent top five PR graduates obtained employment. This information was necessary to make a comparison between the extent of the institution's computer instruction and apparent success of recent graduates.

k. What references, texts and special teaching techniques are used to impart instruction on computers to public relations majors.

Section III: Likert Scale Statements. Responses to these items helped identify the attitudes of faculty members toward instruction on

computers in public relations education. This section collected information concerning the extent to which faculty members in the public relations program agreed with the statements that:

a. Instruction on computers should be included in public relations education.

b. Instruction on computers is vocational training rather than higher education.

c. Instruction on computers is the responsibility of the profession of public relations and not higher education.

d. Computers are essential to the contemporary practice of public relations.

e. Present instruction on computers in their institution is adequate for public relations majors. Responses to this item also helped evaluate the faculty's perception of the adequacy of present instruction on computers.

f. Hands-on use of computers is important to PR education.

g. Instruction on the role of computers in PR can be accomplished adequately by lecture and explanation.

h. Their public relations program is responsive to the needs of the public relations profession. Responses to this item also helped evaluate the faculty's perception of the adequacy of present instruction on computers.

i. Instruction on the role of computers in public relations can be adequately accomplished by lecture and explanation. Responses to this item also helped in understanding the nature and extent of instruction on computers.

j. Computers should be a part of public relations courses

rather than just in computer science courses.

k. A computer science course should be required of public relations majors.

l. The public relations program should have its own communications technology course, including instruction on computers.

m. Knowledge of computer use is not essential for entry level PR graduates.

n. Cost is an obstacle to adequate instruction on computers for public relations majors. Responses to this item also aided in understanding why computer instruction was not more extensive.

o. Capabilities and experience of faculty members are obstacles to adequate instruction on computers for public relations majors. Responses to this item also aided in understanding why computer instruction was not more extensive.

p. The extent of instruction on computers here for public relations majors should be increased.

q. If PR majors take a computer science course outside this department, there is no need for additional instruction on computers within the department.

r. PR graduates with experience in computers do not have an advantage over PR graduates without that experience.

s. Instruction on computers has helped our recent PR graduates get good jobs.

t. The use of computers in the profession of PR is growing rapidly.

u. Employers seeking entry level PR graduates attach no value to instruction on computers as part of PR education.

v. The importance of computers to the practice of public relations has been exaggerated.

Employment Rating Instrument

Using the titles of entry-level positions obtained by recent public relations graduates of the institutions participating in this study, an instrument was devised to permit the rating of these positions by public relations practitioners.

The instrument contained its own instructions; no cover letter was employed. Positions were grouped according to category and respondents were asked to rate the public relations positions in terms of overall, general desirability for entry-level public relations graduates. Rating was done with the aid of a scale of 1 to 5, with 1 meaning "not desirable" and 5 meaning "very desirable."

A copy of the employment rating instrument is included in Appendix G.

Procedure

The cover letter and questionnaire was pretested by local faculty members and graduate students in several departments to ensure all items were understandable.

The cover letter, questionnaire and return envelope were mailed to the 179 institutions in the study population in September 1986. This time was picked because it was assumed that all institutions would have commenced their fall schedules by that time, and the time was early enough in the school period to avoid many other duties that might have occupied the respondents. Plus, it was after the Labor Day holiday.

A log was maintained to indicate when questionnaires were mailed, when followup mailings were made and when responses were received. Accounting was by code number that was removed from the survey when it was returned.

Another questionnaire with cover letter was mailed about 28 days after the first mailing to those institutions whose completed questionnaires had not been received.

A postcard followup was mailed about 45 days after the initial mailing to those institutions whose completed questionnaires had not been received. It was assumed that questionnaires not received by 90 days after the initial mailing would not be received and those institutions would not be included in the study.

As completed questionnaires were received, the mail log was notated and the data from the questionnaire recorded.

The employment rating instrument was similarly monitored with a log. The followup, however, was done by telephone instead of mail, and only one followup was necessary to obtain a 100 percent response rate.

Analysis

General

The purpose of this study was to gather information about the nature and extent of computer instruction provided to public relations majors at those colleges and universities offering accredited or non-accredited public relations programs.

For the most part, therefore, analysis was descriptive only with few computations beyond the reporting of percentages, means and rankings.

The following comparisons, however, were of particular interest:

a. Extent of computer instruction as a function of program accreditation. It is hypothesized that accredited public relations programs would have more extensive instruction on computers than non-accredited programs. A program seeking accreditation is evaluated by public relations practitioners as well as educators, and the relationship of program content to the profession it prepares people for is examined. It is assumed, therefore, that accredited programs would have more closely tailored themselves to the needs of the public relations profession.

b. Quality of employment obtained by recent top public relations graduates as a function of extent of computer instruction. It was hypothesized that those recent graduates of programs with more extensive instruction on computers would obtain higher quality entry-level employment in public relations.

Tables of Data

The following tables or appendices of survey results are included in the study report:

a. List of institutions participating in the study. This appendix indicated the scope of the study.

b. List of accredited institutions participating in the study. This appendix aided in describing the survey population and explaining the comparison between accredited and non-accredited institutions.

c. Titles of administrative units that house public relations programs. This table aided in describing the survey population and indicated the diversity among administrative units examined.

d. Principal professional background of administrators over public relations programs. This table aided in describing the survey population and indicated the diversity among administrative units examined.

e. Average size of graduate and undergraduate public relations programs. This table aided in describing the survey population and provided a basis for comparing accredited and non-accredited programs.

f. Number of public relations programs with a person appointed to head the public relations program. This table aided in describing the survey population and provided a basis for comparing accredited and non-accredited programs.

g. Public relations programs that have an intermediate administrator between the program and the department or unit head. This table aided in describing the survey population and provided a basis for comparing accredited and non-accredited programs.

h. Average number of full-time and part-time public relations faculty members in public relations programs. This table aided in describing the survey population and provided a basis for comparing accredited and non-accredited programs.

i. Unit emphasis as perceived by public relations faculty. This table aided in describing the public relations faculty of the units surveyed.

j. Number of public relations programs that have a computer science course available to public relations majors. This table aided in describing the public relations programs and the extent of instruction on computers available to majors, and also provided a basis for comparing accredited and non-accredited programs.

k. Number of public relations programs that include a discussion of the role of computers in public relations practice in their public relations courses. This table aided in describing the public relations programs and the extent of instruction on computers available to majors, and also provided a basis for comparing accredited and non-accredited programs.

l. Instructional methods used in public relations programs to impart instruction on computers in public relations practice. This table aided in describing the public relations programs and the type of instruction on computers available to majors, and also provided a basis for comparing accredited and non-accredited programs.

m. References, texts or special teaching techniques used to impart instruction on computers to public relations majors in public relations courses. This table aided in describing the techniques used to impart instruction on computers to public relations majors.

n. Number of public relations programs that include a discussion of the role of computers in public relations practice in other required or elective courses for public relations majors. This table aided in describing the public relations programs and the extent of instruction on computers available to majors, and also provided a basis for comparing accredited and non-accredited programs.

o. Number of public relations programs that include "hands on" computer experience instruction for public relations majors. This table aided in describing the public relations programs and the extent of instruction on computers available to majors, and also provided a basis for comparing accredited and non-accredited programs.

p. Number of public relations programs that report availability of

computer experience in internship programs for public relations majors. This table aided in describing the public relations programs and the extent of instruction on computers available to majors, and also provided a basis for comparing accredited and non-accredited programs.

q. Public relations programs that offer other opportunities for public relations majors to work with computers as part of their education. This table aided in describing the public relations programs and the extent of instruction on computers available to majors, and also provided a basis for comparing accredited and non-accredited programs.

r. Other opportunities available to public relations majors to work with computers as part of their education. This table aided in describing the public relations programs and the extent of instruction on computers available to majors.

s. Extent of computer instruction in public relations education by accredited and non-accredited public relations programs. This table aided in describing the public relations programs and the extent of instruction on computers available to majors, and also provided a basis for comparing accredited and non-accredited programs.

t. Rating of employment obtained by recent top public relations graduates, by accredited and non-accredited public relations programs. This table aided in comparing the estimated quality of entry-level employment obtained by recent public relations graduates of accredited public relations programs and of non-accredited public relations programs.

u. How public relations faculty perceive themselves. This table aided in describing the faculty of public relations programs in terms of

their perceived reference groups.

v. How public relations faculty perceive themselves as a function of average years of professional practice and teaching experience. This table aided in describing the faculty of public relations programs in terms of their perceived reference groups as a function of professional and teaching experience.

w. Computer background and experience of faculty in public relations programs. This table aided in describing the faculty of public relations programs in terms of their experience with computers.

The following tables represented faculty responses to Likert scale items and depicted faculty attitudes toward various aspects of instruction on computers and the role of computers in the profession of public relations. In addition to describing the faculty of public relations programs, the tables provided a basis for comparing accredited and non-accredited programs.

x. Agreement with the statement that instruction on computers should be included in public relations education.

y. Agreement with the statement that instruction on computers is vocational training rather than higher education.

z. Agreement with the statement that instruction on computers is properly the responsibility of the public relations profession and not higher education.

aa. Agreement with the statement that computers are essential to the practice of public relations.

bb. Agreement with the statement that hands-on use of computers is important to public relations education.

cc. Agreement with the statement that instruction on the role of

computers in public relations practice can be accomplished adequately by lecture-explanation alone.

dd. Agreement with the statement that the institution's public relations education program is responsive to the needs of the public relations profession.

ee. Agreement with the statement that instruction on computers should be included in public relations courses rather than just in computer science courses.

ff. Agreement with the statement that a computer science course should be required of all public relations majors.

gg. Agreement with the statement that cost is an obstacle to more instruction at the institution on computers for public relations majors.

hh. Agreement with the statement that lack of faculty computer know-how is an obstacle to more instruction on computers for public relations majors.

ii. Agreement with the statement that the extent of instruction on computers for public relations majors should be increased.

jj. Agreement with the statement that public relations graduates with experience in computers have an advantage over public relations graduates without that experience.

kk. Agreement with the statement that instruction on computers has helped recent public relations graduates get good jobs.

ll. Agreement with the statement that the use of computers in the profession of public relations is growing rapidly.

mm. Agreement with the statement that employers seeking entry level public relations graduates place value on computer instruction as part of public relations education.

ENDNOTES

[1]Fred L. Williams, ed. Journalism & Mass Communication Directory Vol. 4, 1986 (Columbia, S. C.: Association for Education in Journalism and Mass Communication, 1986), p. 3.

[2]Ibid., p. 54.

[3]Ibid., p. 53.

CHAPTER IV

ANALYSIS OF DATA

General

Of the 179 institutions in the sample, 122 responded to the initial survey and two follow-up mailings, for an overall response rate of 68.2 percent.

The sample contained 34 accredited institutions and 145 non-accredited institutions. Thirty-two accredited institutions responded, plus seven institutions that reported they had successfully undergone the accreditation process and were awaiting confirmation of accreditation. These 32 accredited institutions and seven institutions awaiting confirmation of accreditation were treated as accredited programs. Response rate for accredited programs was 95.1 percent (39 responses out of 41 possible).

Of the 138 institutions which were neither accredited nor awaiting confirmation of accreditation, 81 responded to the survey for a response rate of 58.7 percent.

For the 81 non-accredited institutions, none had ever been accredited before and 21, or 25.9 percent, reported they intended to seek accreditation. Four, or 4.9 percent, reported they had previously sought accreditation.

Among the 122 institutions participating in this study, data for 156 public relations faculty members are included.

Characteristics of Program Respondents

The question that asked for the title of the administrative unit which housed the public relations sequence or program produced 111 usable responses. As indicated in Table I, public relations programs are part of administrative units that have a variety of titles. As Table I shows, the most common title is "journalism" with "communications" ranking second. While some titles appeared frequently, others are unique to only one program.

TABLE I

TITLES OF ADMINISTRATIVE UNITS THAT HOUSE PUBLIC RELATIONS PROGRAMS

Title	Number of Programs
Journalism	38
Communications	27
Mass Communications	9
Journalism and Mass Communications	7
Communication Arts	6
Communication Studies	4
Business Administration	4
Advertising and Public Relations	3
English and Communications	2
English and Journalism	2
Journalism, Broadcasting and Speech	1
Journalism and Broadcasting	1
Journalism and Communication Studies	1
Journalism and Printing	1
Journalism and Public Communication	1
Journalism and Radio-Television	1
Journalism and Telecommunications	1
Public Relations	1
Speech, Theatre and Mass Communications	1
Total	111

Administrators of these units had professional experience in a number of fields, with those having experience in news-editorial predominating. This held true for both accredited and non-accredited programs. Administrators with professional experience in public relations ranked second for accredited and non-accredited programs.

As shown in Table II, for non-accredited programs, there was a sizable proportion of administrators with professional experience in fields other than mass communications, including speech, drama, and business. This was not true for accredited programs.

With a Chi-square of 19.6552, there is a significant relationship at the 95 percent confidence level between professional background and program accreditation.

TABLE II

PRINCIPAL PROFESSIONAL BACKGROUND OF ADMINISTRATORS OVER PUBLIC RELATIONS PROGRAMS
(MULTIPLE RESPONSES POSSIBLE)

	News-Ed	B´Casting	Advertising	PR	Other
Accredited	26	2	4	14	1
Non-Accredited	18	7	1	13	17
All Programs	44	9	5	27	18

Undergraduate public relations programs averaged about 118 students, while graduate programs averaged close to 16 students per program. Of particular interest in Table III is the fact that

undergraduate programs for accredited sequences averaged larger than undergraduate programs for non-accredited programs, while the opposite was true for graduate programs. Plus, a larger proportion of accredited public relations programs had corresponding graduate programs than did the non-accredited programs.

Despite these apparent differences, however, there was no statistically significant difference between the averages for the different groups.

TABLE III

AVERAGE SIZE OF GRADUATE AND UNDERGRADUATE PUBLIC RELATIONS PROGRAMS

	Graduate Programs	Undergraduate Programs
Accredited Programs	14.92 Students (25 Programs)	162.25 Students (35 Programs)
Non-accredited Programs	16.78 Students (15 Programs)	96.85 Students (71 Programs)
Average Overall	15.62 Students (40 Programs)	118.44 Students (106 Programs)

One hundred and two usable responses were received to the question that asked whether a person had been appointed head of the public relations sequence, and two-thirds of these reported that such an administrator had been appointed, as noted in Table IV. A greater number of accredited programs reported that a person had been appointed

to head the public relations sequence than did non-accredited programs, but Chi-square tests failed to find a significant relationship between the number of programs with administrators and accreditation status.

TABLE IV

NUMBER OF PUBLIC RELATIONS PROGRAMS WITH A PERSON APPOINTED TO HEAD THE PUBLIC RELATIONS PROGRAM

	Program Head Appointed	Program Head Not Appointed	Total
Accredited	28	8	36
Non-Accredited	41	25	66
All Programs	69	33	102

Table V reports on intermediate administrators.

TABLE V

PUBLIC RELATIONS PROGRAMS THAT HAVE AN INTERMEDIATE ADMINISTRATOR BETWEEN THE PROGRAM AND THE DEPARTMENT OR UNIT HEAD, WITH THE BACKGROUND OF THE INTERMEDIATE ADMINISTRATOR INDICATED

	News-Ed	B´Casting	Advertising	PR	Other	Total
Accredited	2	1	2	10	1	16
Non-Accredited	12	1	3	22	2	40
All Programs	14	2	5	32	3	56

As shown in Table V, somewhat less than half the programs responding reported that there was an administrator appointed between the public relations program and the overall unit administrator. The majority of these administrators had professional experience in public relations, with experience in news-editorial second in frequency. This appeared true for both accredited and non-accredited public relations programs, but there was not a significant relationship between background of intermediate administrators and accreditation status.

Table VI shows that accredited public relations programs averaged 2.33 full-time instructors, as compared to 1.79 full-time instructors for non-accredited programs.

TABLE VI

AVERAGE NUMBEROF FULL-TIME AND PART-TIME PUBLIC RELATIONS FACULTY MEMBERS IN PUBLIC RELATIONS PROGRAMS

	Number of Respondents	Average Nr. Full Time Instructors	Average Nr. Part Time Instructors	Overall
Accredited	33	2.33	1.91	4.24
Non-Accredited	56	1.79	1.16	2.95
All Programs	89	1.99	1.44	3.43

Similarly, accredited public relations programs averaged 1.91 part-time instructors as compared to 1.16 part-time instructors for non-accredited programs.

Overall, accredited programs averaged 1.29 instructors -- considering full-time as well as part-time -- more than non-accredited public relations programs.

There was not, however, a significant different between the average number of instructors for accredited versus non-accredited programs.

Table VII reports on the perceived emphasis of the overall administrative units.

TABLE VII

MEAN SCORES OF UNIT EMPHASIS AS PERCEIVED BY PUBLIC RELATIONS FACULTY, ON A SCALE OF 1 TO 5, WITH 1 = "A VERY GREAT AMOUNT," AND 5 = "NONE" (N = 143)

Perception of Unit Emphasis	Mean Score		
	Accredited Programs	Non-Accredited Programs	All Programs
Educating Undergraduate Majors	1.26	1.19	1.22
Interaction with the PR Profession	2.03	2.44	2.09
Service to the Community	2.50	2.71	2.52
Basic Research	2.89	3.38	3.17
Applied Research	2.74	3.23	3.21
Educating Graduate Students	2.38	3.52	3.24
Educating Undergraduate Non-majors	3.29	3.29	3.26

Perceived emphasis of the overall departments or administrative units of which the public relations programs are a part was examined by

a question which asked faculty members to score emphasis on a scale of 1 to 5, with 1 meaning "a very great amount" to 5 meaning "none." Of the 155 faculty members who participated in the study, 143 or 92 percent provided usable responses, as indicated in Table VII.

As Table VII indicates, "educating undergraduate majors" ranked at the top of the list of emphases, and "educating undergraduate non-majors" ranked at the bottom. While there were slight differences between rankings by faculty of accredited programs and faculty of non-accredited programs, faculty of both categories of programs ranked "educating undergraduate majors" and "interaction with the public relations profession" in first and second places.

Characteristics of Instruction on Computers

Table VIII shows that nearly all the programs responding reported that they had a computer science course available to their public relations majors. Only two non-accredited programs reported that such a course was not available.

TABLE VIII

NUMBER OF PUBLIC RELATIONS PROGRAMS THAT HAVE A COMPUTER SCIENCE COURSE AVAILABLE TO PUBLIC RELATIONS MAJORS

	Not Available	Elective Course	Required Course	Total
Accredited	0	35	4	39
Non-Accredited	2	57	11	70
All Programs	2	92	15	109

For the programs which had a computer science course available to their majors, only about 14 percent required the course of their majors; the remainder offered it as an elective.

TABLE IX

NUMBER OF PUBLIC RELATIONS PROGRAMS THAT REQUIRE PUBLIC RELATIONS MAJORS TO TAKE A BASIC JOURNALISM REPORTING COURSE THAT INCLUDES USING WORD PROCESSING EQUIPMENT

	Course Required Of PR Majors	Course Not Required Of PR Majors	Total
Accredited	28	11	39
Non-Accredited	46	24	70
All Programs	74	35	109

There was not a significant relationship between the availability of a computer science course to public relations majors and program accreditation.

Most programs, regardless of accreditation status, require public relations majors to take a basic journalism reporting course that includes the use of word processing equipment. As Table IX indicates, only about a third of the programs do not require such a course of their majors.

There was not a significant relationship between whether such a course was required of public relations majors and accreditation status.

To the question that asked whether a discussion of the role of

computers in public relations practice was included in courses for public relations majors, 110 usable responses were received. As indicated in Table X, for these responses, about 25 percent said no such discussion was included in their courses for public relations majors, while the remainder included such discussion. For accredited public relations programs, the proportion of programs including a discussion of computers in their courses appeared greater than the proportion of non-accredited programs that discussed computers.

TABLE X

NUMBER OF PUBLIC RELATIONS PROGRAMS THAT INCLUDE A DISCUSSION OF THE ROLE OF COMPUTERS IN PUBLIC RELATIONS PRACTICE IN THEIR PUBLIC RELATIONS COURSES

	Discussion Included	Discussion Not Included	Total
Accredited	37	2	39
Non-Accredited	45	26	71
All Programs	82	28	110

With a Chi-square of 13.1562, there was a significant relationship at the 95 percent level of confidence between whether a discussion of the role of computers in public relations practice was included in public relations courses, and the accreditation status of a program.

Thus, accredited programs were more likely to include such discussion in public relations courses than were non-accredited programs.

As depicted by Table XI, for those public relations courses which included a discussion of the role of computers in the practice of public relations, the lecture method was the primary means for conducting such instruction. Use of other instructional methods, such as demonstration, discussion and application, was fairly evenly divided, with no method standing out as being used more. There was no significant relationship between instructional methods and accreditation status.

TABLE XI

INSTRUCTIONAL METHODS USED IN PUBLIC RELATIONS PROGRAMS TO IMPART INSTRUCTION ON COMPUTERS IN PUBLIC RELATIONS PRACTICE (MULTIPLE RESPONSES POSSIBLE)

	Lecture	Demonstration	Discussion	Application
Accredited	33	15	13	15
Non-Accredited	34	13	18	15
All Programs	67	28	31	30

Subjects were also asked to identify any special references, texts or unique teaching techniques used to impart instruction on computers to public relations majors. Table XII lists responses to this question. Some of the responses duplicate responses to a later question concerning availability of other opportunities for public relations majors to acquire computer experience, e.g., computer laboratories were listed, which at some institutions may be the same as computer centers available to students.

TABLE XII

REFERENCES, TEXTS OR SPECIAL TEACHING TECHNIQUES USED TO IMPART INSTRUCTION ON COMPUTERS TO PUBLIC RELATIONS MAJORS IN PUBLIC RELATIONS COURSES (LISTED ALPHABETICALLY)

All Skill Courses Require Use of Computers
Chapters in Introductory Public Relations Textbooks
Computer Bibliography
Computer Equipment Manuals
Computer Laboratories
Development of Crisis Management Software
Guest Speakers from Industry and Public Relations Practice
Instructional Tapes Provided by Computer Manufacturers
Journal Articles
Locally Prepared Handouts
Locally Produced Manuals for Production Courses that Use Computers
On-Line Data Services: PR Link, THE SOURCE, COMPUSERVE.
Orientation on Computers as Part of General Orientation at the Beginning of the Public Relations Program
Public Relations Society of America Bibliography
Publications from the Foundation for Public Relations Research and Education
Software Manuals
Training and Demonstration Disks
Training Manuals that Come with Computer Software
Use of Computers for Readability Studies of Public Relations Products
Use of Computers to Produce Proposals, News Releases, and Complete Fund Raising Exercises

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To the question whether the role of computers in public relations practice was included in other required or elective courses for public relations majors -- other than public relations, basic journalism reporting or computer science courses -- 107 usable responses were received. As indicated in Table XIII, slightly less than half of the programs responding reported that discussion of the role of computers was included in other courses. For accredited programs, just over half (56 percent) gave a positive response to the question, while 41 percent

of non-accredited programs included such discussion. There was not, however, a significant relationship between whether such instruction was included in other courses and program accreditation status.

TABLE XIII

NUMBER OF PUBLIC RELATIONS PROGRAMS THAT INCLUDE A DISCUSSION OF THE ROLE OF COMPUTERS IN PUBLIC RELATIONS PRACTICE IN OTHER REQUIRED OR ELECTIVE COURSES FOR PUBLIC RELATIONS MAJORS

	Included In Other Courses	Not Included In Other Courses	Total
Accredited	22	17	39
Non-Accredited	28	40	68
All Programs	50	57	107

Table XIV addresses the perceived need for "hands-on" instruction.

TABLE XIV

NUMBER OF PUBLIC RELATIONS PROGRAMS THAT INCLUDE "HANDS ON" COMPUTER EXPERIENCE IN INSTRUCTION FOR PUBLIC RELATIONS MAJORS

	"Hands-On" Experience Included	"Hands-On" Experience Not Included	Total
Accredited	30	9	39
Non-Accredited	41	30	71
All Programs	71	39	110

As Table XIV indicates, nearly two-thirds of all programs require "hands-on" computer experience as part of their instruction for public relations majors. One-hundred-ten usable responses were received to the question on this topic, and the proportion of accredited programs that require "hands-on" experience was greater than the proportion of non-accredited programs.

With a Chi-square of 4.04516, there was a significant relationship at the 95 percent level of confidence between the inclusion of "hands-on" computer experience and program accreditation status. Thus, accredited public relations programs were more apt to include "hands-on" computer experience for public relations majors than were non-accredited programs.

Numerous public relations sequences have internship programs available to public relations majors to aid them in preparing for professional practice. One hundred and two usable responses were received in reply to the survey question which asked whether such internship programs offered computer experience to students.

TABLE XV

NUMBER OF PUBLIC RELATIONS PROGRAMS THAT REPORT AVAILABILITY OF COMPUTER EXPERIENCE IN INTERNSHIP PROGRAMS FOR PUBLIC RELATIONS MAJORS

	Available In Internship Programs	Not Available In Internship Programs	Total
Accredited	31	5	36
Non-Accredited	54	12	66
All Programs	85	17	102

As indicated in Table XV, of the programs overall, about 83 percent reported that computer experience was available in their internship programs. There was no significant difference between accredited and non-accredited programs on responses to this question. Within both categories of programs, roughly the same proportion had an internship program that offered computer experience to students.

Besides including instruction on computers in their regular course offerings such as a course in basic journalism reporting courses, as a course available outside the department, as a part of a public relations course or an internship program that offered computer experience, subjects were asked if any other opportunities were available in their education programs for public relations majors to obtain experience with computers.

TABLE XVI

PUBLIC RELATIONS PROGRAMS THAT OFFER OTHER OPPORTUNITIES FOR PUBLIC RELATIONS MAJORS TO WORK WITH COMPUTERS AS PART OF THEIR EDUCATION

	Offer Other Opportunities	Do Not Offer Other Opportunities	Total
Accredited	36	3	39
Non-Accredited	64	7	71
All Programs	100	10	110

As indicated in Table XVI, 110 usable responses were received to

this question, with 91 percent of the programs overall reporting that such opportunities existed. This proportion held true for both accredited and non-accredited public relations programs, with no significant difference between the two groups of programs.

Those programs which responded positively to the question concerning the availability of other opportunities for public relations majors to acquire computer experience were asked to identify some of these other opportunities. Table XVII lists the types of other opportunities reported by respondents.

TABLE XVII

OTHER OPPORTUNITIES AVAILABLE TO PUBLIC RELATIONS MAJORS TO WORK WITH COMPUTERS AS PART OF THEIR EDUCATION (LISTED ALPHABETICALLY)

Business Courses
Campus Computer Center
Class in Publication Layout and Design
Class in Communications Research Techniques
Demonstrations and Seminars by Computer Manufacturers
Departmental Microcomputer Laboratory
Desk-top Publishing Equipment within the Department
Internships
Newspaper Workshop
Public Relations Student Society of America Newsletter
Public Relations Student Society of America PR Agency
Student News Service
Yearbook Workshop

It is clear that some of the responses to this question duplicate responses to other questions, e.g., internships were identified as

another opportunity, but were specifically addressed in an earlier question.

As a means of comparing the extent of computer instruction available to public relations majors, public relations programs were given a score based on how many of seven computer instruction elements were present in their programs. The seven elements were:

1. Whether a computer science course was available to public relations majors.

2. Whether discussion of the role of computers in the profession of public relations was included in public relations courses.

3. Whether discussion of the role of computers in the profession of public relations was included in other courses required of public relations majors.

4. Whether public relations majors were required to take a basic journalism reporting course that included use of word processing equipment.

5. Whether "hands-on" computer experience was required of public relations majors.

6. Whether opportunities to gain computer experience were available in internship programs for public relations majors.

7. Whether other opportunities existed for public relations majors to acquire experience with computers.

Programs were given a score from 0 through 7 according to how many of these elements were present. While it is understood that not all of these elements are equal to one another in terms of value to public relations majors, their presence or absence in a program is a rough approximation of the extent of attention given to instruction on

computers for public relations majors and provides a basis for comparing programs.

As indicated in Table XVIII, the overall mean score for all programs was 5.34, meaning that a program participating in this study had an average of more than five of the elements. The average for accredited programs appeared higher than that for non-accredited programs, but there was no statistically significant difference.

TABLE XVIII

EXTENT OF COMPUTER INSTRUCTION IN PUBLIC RELATIONS EDUCATION BY ACCREDITED AND NON-ACCREDITED PUBLIC RELATIONS PROGRAMS (SCALE OF 0 TO 7, WITH 7 = MOST EXTENSIVE)

	Number	Mean Score
Accredited	37	5.78
Non-accredited	71	4.87
All Programs	108	5.34

Subjects were also asked to indicate the type of employment obtained by the top five most recent graduates of the public relations program. The responses were then submitted to 24 public relations professionals of the Oklahoma City and Tulsa, Oklahoma, chapters of the Public Relations Society of America and the professionals were asked to rate the types of employment on a scale of 1 to 5, with 5 indicating the employment was "most beneficial" to a beginning public relations

professional. Twenty-two of the 24 surveys were returned, for an initial response rate of 87.5 percent. With a telephone call follow-up, a response rate of 100 percent was obtained.

The ratings submitted by the public relations professionals were tabulated and a mean score computed for each type of employment. Overall scores were then obtained for each public relations program based on the type of employment its graduates had obtained. This score could be called a "job success score," and while categories of employment are not necessarily equal to one another and the value of any type of job is subject to many factors, the scores provide a rough estimate that is useful for comparing the output of public relations programs.

There were 86 usable responses to this question, and Table XIX indicates that the overall "job success" score for all programs was 3.67 on a scale of 1 to 5, with 5 meaning the most beneficial type of employment. The mean "job success" score for accredited programs was higher than that for non-accredited programs, but there was no significant difference between the two scores.

TABLE XIX

RATING OF EMPLOYMENT OBTAINED BY RECENT TOP PUBLIC RELATIONS GRADUATES, BY ACCREDITED AND NON-ACCREDITED PUBLIC RELATIONS PROGRAMS
(SCALE OF 1 TO 5, WITH 5 = MOST BENEFICIAL EMPLOYMENT)

	Number	Mean Score
Accredited	33	3.75
Non-accredited	53	3.62
All Programs	86	3.67

An effort was made to correlate "extent of computer instruction" with "job success" to examine the relationship between the two. A Pearson product moment correlation test of the two measures yielded a correlation of 0.0468. There is, therefore, no meaningful relationship between the two measures for the respondents.

Similarly, accredited programs were examined separately, as were non-accredited programs. No relationship was found between the measures of "extent of computer instruction" and "job success" for either accredited or non-accredited programs.

Characteristics of Faculty Respondents

Faculty were queried on their self-perceptions or reference groups. They might have perceived themselves as members of an institution, as members of a particular administrative department or unit, or as members of their teaching discipline. Table XX depicts the responses.

TABLE XX

HOW PUBLIC RELATIONS FACULTY PERCEIVE THEMSELVES
(IDENTIFICATION OF REFERENCE GROUPS BY FACULTY)

Perception of Self	Number of Faculty		
	Accredited	Non-accredited	Overall
As a Member of the Department	6	20	26 (18%)
As a Teacher of Public Relations	15	13	28 (19%)
As a College/University Member	11	22	33 (23%)
As a Public Relations Professional	16	42	58 (40%)
Total	48	97	145 (100%)

As Table XX indicates, the largest proportion perceived themselves as public relations professionals in a teaching situation, rather than as teachers or as departmental or institutional members.

With a Chi-square of 46.520, there is a significant difference at the 95 percent level of confidence among the different categories overall depicted in the table, but no significant difference between faculty of accredited and faculty of non-accredited programs.

Table XXI examines faculty teaching and professional background.

TABLE XXI

HOW PUBLIC RELATIONS FACULTY PERCEIVE THEMSELVES (IDENTIFICATION OF REFERENCE GROUPS) AS A FUNCTION OF AVERAGE YEARS OF PROFESSIONAL PRACTICE AND TEACHING EXPERIENCE
(N = 147)

	Average Number of Years Experience	
Perception of Self	PR Practice	Teaching
As a Member of the Department	7.3	9.8
As a Teacher of Public Relations	11.7	9.0
As a College/University Member	9.7	7.5
As a Public Relations Professional	16.3	5.7
Average Overall	12.2	7.4

Table XXI indicates that those public relations faculty members with less teaching experience and greater professional experience were more apt to identify themselves as public relations professionals than were faculty members with more teaching experience or less professional

experience. An examination of faculty of accredited programs and of non-accredited programs was not conducted due to the small number of accredited programs.

Table XXII identifies the background and experience of faculty members with computers on four points: ownership of a computer, use or access to a computer, use of computers in public relations practice, and formal instruction on computers. Of the 146 usable responses, 62 percent use or have access to a computer and about half own or have owned a computer. More than third have had formal instruction on computers and about a fourth of the group used computers in public relations practice.

There was no significant relationship between computer experience and program accreditation.

TABLE XXII

COMPUTER BACKGROUND AND EXPERIENCE OF FACULTY IN PUBLIC RELATIONS PROGRAMS
(MULTIPLE RESPONSES POSSIBLE)(N = 146)

	Now Own Or Owned A Computer	Now Use Or Have Access to Computers	Used Computers In PR Practice	Had Formal Instruction On Computers
Accredited	28	34	13	17
Non-accredited	42	56	22	33
All Programs	70	90	35	50

Faculty Attitudes Toward Computer Instruction in Public Relations Programs

A five-point Likert scale examined faculty attitudes toward various aspects of instruction on computers for public relations majors, on the general value of computer instruction and on obstacles to increased computer instruction. For each of the following tables, the range of values is from 1 to 5, with 1 meaning "strongly disagree" and 5 meaning "strongly agree."

With 110 usable responses, Table XXIII indicates strong agreement with the statement that instruction on computers should be included in public relations education. Overall, 85 percent agreed with the statement and only 2 percent disagreed.

For accredited programs, extent of agreement was even greater at 94 percent, while extent of agreement among non-accredited programs was 80 percent. For both categories of programs, the proportion that disagreed with the statement was about the same. There was not, however, a significant difference between the means of the two groups.

TABLE XXIII

AGREEMENT WITH THE STATEMENT THAT INSTRUCTION ON COMPUTERS SHOULD BE INCLUDED IN PUBLIC RELATIONS EDUCATION

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	39	19 (48%)	18 (46%)	1 (3%)	1 (3%)	0 (0%)	4.41
Non-accred.	71	34 (48%)	23 (32%)	13 (18%)	1 (2%)	0 (0%)	4.27
All Programs	110	53 (48%)	41 (37%)	14 (13%)	2 (2%)	0 (0%)	4.32

Table XXIV indicates general disagreement among the 110 usable responses overall with the statement that instruction on computers is vocational training rather than higher education. While 21 percent overall agreed with the statement, 65 percent took the opposite view.

TABLE XXIV

AGREEMENT WITH THE STATEMENT THAT INSTRUCTION ON COMPUTERS IS VOCATIONAL TRAINING RATHER THAN HIGHER EDUCATION

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	39	2 (5%)	10 (26%)	3 (8%)	13 (33%)	11 (28%)	2.46
Non-accred.	71	2 (3%)	10 (14%)	12 (17%)	32 (45%)	15 (21%)	2.32
All Programs	110	4 (4%)	20 (17%)	15 (14%)	45 (41%)	26 (24%)	2.37

For accredited programs, agreement at 31 percent was greater than the proportion of agreement for non-accredited programs (17 percent) while the proportion of disagreement among non-accredited programs (66 percent) was slightly greater than the proportion of disagreement among accredited programs (61 percent).

There was no significant difference between the means for accredited and non-accredited programs.

Table XXV shows there was general disagreement among the 109 usable responses with the statement that instruction on computers is the responsibility of the profession of public relations and not higher education. Seven percent of the faculty agreed; 75 percent disagreed.

TABLE XXV

AGREEMENT WITH THE STATEMENT THAT INSTRUCTION ON COMPUTERS IS PROPERLY THE RESPONSIBILITY OF THE PUBLIC RELATIONS PROFESSION AND NOT HIGHER EDUCATION

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	38	0 (0%)	2 (6%)	7 (18%)	22 (58%)	7 (18%)	2.11
Non-accred.	71	1 (1%)	4 (5%)	13 (18%)	41 (58%)	12 (18%)	2.17
All Programs	109	1 (1%)	6 (6%)	20 (18%)	63 (57%)	19 (18%)	2.15

Extent of agreement among accredited programs was about same as the among non-accredited programs, and both disagreed to about the same extent. There was not a significant difference between the means of the two groups of respondents.

Table XXVI reports attitudes toward essentiality of computers.

TABLE XXVI

AGREEMENT WITH THE STATEMENT THAT COMPUTERS ARE ESSENTIAL TO THE PRACTICE OF PUBLIC RELATIONS

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	37	12 (32%)	18 (50%)	3 (8%)	2 (5%)	2 (5%)	3.97
Non-accred.	70	15 (21%)	30 (43%)	13 (19%)	10 (14%)	2 (3%)	3.66
All Programs	107	27 (25%)	48 (45%)	16 (15%)	12 (11%)	4 (4%)	3.77

There was general agreement with the statement that computers are essential to the practice of public relations, with about 70 percent of the respondents overall agreeing, as shown in Table XXVI. There was a greater proportion of agreement among faculty of accredited programs (82 percent) than among faculty of non-accredited programs (64 percent), but there was no significant difference between the means of the two groups.

With 110 usable responses, there was strong agreement among all programs that "hands-on" use of computers was important to public relations education. As indicated in Table XXVII, overall about 83 percent of the programs agreed with the statement.

TABLE XXVII

AGREEMENT WITH THE STATEMENT THAT HANDS-ON USE OF COMPUTERS IS IMPORTANT TO PUBLIC RELATIONS EDUCATION

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	39	10 (25%)	25 (64%)	3 (8%)	1 (3%)	0 (0%)	4.13
Non-accred.	71	19 (27%)	38 (53%)	10 (14%)	4 (6%)	0 (0%)	4.01
All Programs	110	29 (26%)	63 (57%)	13 (12%)	5 (5%)	0 (0%)	4.05

There was a greater extent of agreement among accredited programs (89 percent) than among non-accredited programs (80 percent), but there was no significant difference between the means of the two groups.

As shown in Table XXVIII, there was substantial disagreement with the statement that the lecture method of instruction was adequate for acquainting public relations majors with the role of computers in public relations practice. About 84 percent overall disagreed with this idea, and the extent of disagreement was greater among accredited public relations programs (94 percent) than among non-accredited programs (84 percent). There was not, however, a significant difference between the means of the two groups.

TABLE XXVIII

AGREEMENT WITH THE STATEMENT THAT INSTRUCTION ON THE ROLE OF COMPUTERS IN PUBLIC RELATIONS PRACTICE CAN BE ACCOMPLISHED ADEQUATELY BY LECTURE-EXPLANATION ALONE

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	38	0 (0%)	1 (3%)	1 (3%)	30 (79%)	6 (15%)	1.92
Non-accred.	71	0 (0%)	6 (8%)	10 (14%)	41 (58%)	14 (20%)	2.11
All Programs	109	0 (0%)	7 (6%)	11 (10%)	71 (66%)	20 (18%)	2.05

There was strong agreement with the statement that the school's education program responded to the needs of the profession, as Table XXIX shows. Overall, about 87 percent of the respondents agreed with the statement. Agreement was greater among accredited programs (90 percent) than among non-accredited programs (86 percent) but there was no significant difference between the groups. It is interesting to note

that the only disagreement with the statement occurred among non-accredited programs.

TABLE XXIX

AGREEMENT WITH THE STATEMENT THAT THE INSTITUTION'S PUBLIC RELATIONS EDUCATION PROGRAM IS RESPONSIVE TO THE NEEDS OF THE PUBLIC RELATIONS PROFESSION

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	39	14 (36%)	21 (54%)	4 (10%)	0 (0%)	0 (0%)	4.28
Non-accred.	71	14 (20%)	47 (66%)	6 (8%)	2 (3%)	2 (3%)	3.97
All Programs	109	28 (25%)	68 (62%)	10 (9%)	2 (2%)	2 (2%)	4.08

Table XXX reports extent of agreement that instruction on computers should be in public relations courses.

TABLE XXX

AGREEMENT WITH THE STATEMENT THAT INSTRUCTION ON COMPUTERS SHOULD BE INCLUDED IN PUBLIC RELATIONS COURSES RATHER THAN JUST IN COMPUTER SCIENCE COURSES

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	39	7 (18%)	23 (58%)	3 (8%)	5 (13%)	1 (3%)	3.77
Non-accred.	71	10 (14%)	31 (44%)	23 (32%)	7 (10%)	0 (0%)	3.62
All Programs	109	17 (15%)	54 (49%)	26 (24%)	12 (11%)	1 (1%)	3.67

The statement that instruction on computers should be included in public relations courses rather than just in computer science courses prompted only slight agreement among the 109 programs represented among the responses. Overall, 64 percent of the programs agreed while 12 percent disagreed.

Among accredited programs, 76 percent agreed that public relations courses should include instruction on computers, and 58 non-accredited programs agreed. However, the proportion of accredited programs that disagreed with the statement was slightly greater (16 percent) than the proportion of non-accredited programs that disagreed (12 percent).

There was no significant difference between the means of accredited and non-accredited programs.

With 109 usable responses overall, Table XXXI indicates only slight agreement with the statement that a computer science course should be required of all public relations majors. Overall, about half of the programs responding agreed with the statement while nearly a third disagreed.

TABLE XXXI

AGREEMENT WITH THE STATEMENT THAT A COMPUTER SCIENCE COURSE SHOULD BE REQUIRED OF ALL PUBLIC RELATIONS MAJORS

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	39	10 (26%)	9 (23%)	8 (20%)	11 (28%)	1 (3%)	3.41
Non-accred.	70	12 (17%)	23 (33%)	14 (20%)	18 (26%)	3 (4%)	3.34
All Programs	109	22 (20%)	32 (29%)	22 (20%)	29 (27%)	4 (4%)	3.37

The proportion of accredited programs that agreed with the statement was slightly higher (49 percent) than the proportion of non-accredited programs (41 percent) that agreed, while the proportion that disagreed was roughly the same for both groups. There was no significant difference between the means of the groups.

Table XXXII indicates that there was slight agreement among the 110 usable responses with the statement that cost is an obstacle to more instruction on computers for public relations majors. Two-thirds of the programs overall agreed (67 percent) while about one-fourth (26 percent) disagreed with the statement.

TABLE XXXII

AGREEMENT WITH THE STATEMENT THAT COST IS AN OBSTACLE TO MORE INSTRUCTION AT THE INSTITUTION ON COMPUTERS FOR PUBLIC RELATIONS MAJORS

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	39	17 (44%)	8 (20%)	4 (10%)	10 (26%)	0 (0%)	3.82
Non-accred.	71	24 (34%)	25 (35%)	4 (6%)	18 (25%)	0 (0%)	3.77
All Programs	110	41 (37%)	33 (30%)	8 (7%)	28 (26%)	0 (0%)	3.79

Among accredited programs, the proportion of faculty agreement with the statement (64 percent) was slightly less than the proportion of agreement among non-accredited programs (69 percent) while the

proportion of disagreement among both groups was about the same. There was no significant difference between the means of the two groups.

With 109 usable responses overall, faculty generally disagreed with the statement that lack of faculty computer know-how was an obstacle to more instruction on computers for public relations majors. Only 31 percent overall agreed with that statement, while well over half the respondents disagreed.

TABLE XXXIII

AGREEMENT WITH THE STATEMENT THAT LACK OF FACULTY COMPUTER KNOW-HOW IS AN OBSTACLE TO MORE INSTRUCTION ON COMPUTERS FOR PUBLIC RELATIONS MAJORS

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	39	1 (2%)	11 (28%)	3 (8%)	19 (49%)	5 (13%)	2.66
Non-accred.	70	3 (4%)	19 (27%)	6 (9%)	35 (50%)	7 (10%)	2.62
All Programs	109	4 (4%)	30 (27%)	9 (8%)	54 (50%)	12 (11%)	2.63

Among accredited programs, 30 percent of the respondents concurred that faculty knowledge was an obstacle but 62 percent did not concur. For non-accredited programs, this proportion of agreement versus disagreement remained roughly the same, with 31 percent agreement and 60 percent disagreement. There was no significant difference between the means for the groups.

There was slight agreement among the 109 usable responses overall

with the statement that the extent of instruction on computers for public relations majors should be increased. About two-thirds of the programs agreed with the statement, while one-fifth took a neutral position and 14 percent disagreed.

Table XXXIV indicates that 78 percent of accredited programs faculty responding agreed with the statement while only 58 percent of non-accredited programs agreed. A greater proportion of non-accredited programs selected a neutral position and a greater proportion disagreed with the statement compared with accredited programs.

There was not, however, a significant difference between the means of the two groups.

TABLE XXXIV

AGREEMENT WITH THE STATEMENT THAT THE EXTENT OF INSTRUCTION ON COMPUTERS FOR PUBLIC RELATIONS MAJORS SHOULD BE INCREASED

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	38	5 (12%)	25 (66%)	5 (12%)	4 (10%)	0 (0%)	3.89
Non-accred.	71	9 (13%)	32 (45%)	18 (25%)	12 (17%)	0 (0%)	3.54
All Programs	109	14 (13%)	57 (52%)	23 (21%)	16 (14%)	0 (0%)	3.66

As shown in Table XXXV, with 109 usable responses, there was slight agreement overall with the statement that public relations graduates who had had experience in computers had an advantage over public relations

graduates without that experience. About two-thirds (64 percent) overall agreed with the statement while 15 percent disagreed and about one-fifth selected the neutral position.

Among accredited programs a greater proportion of faculty agreed with the statement (71 percent) than among non-accredited programs (61 percent), but the proportion of accredited programs which disagreed with the statement (18 percent) was greater than the proportion among non-accredited programs which disagreed (12 percent).

There was no significant difference between the means of accredited and non-accredited programs.

TABLE XXXV

AGREEMENT WITH THE STATEMENT THAT PUBLIC RELATIONS GRADUATES WITH EXPERIENCE IN COMPUTERS HAVE AN ADVANTAGE OVER PUBLIC RELATIONS GRADUATES WITHOUT THAT EXPERIENCE

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	38	8 (21%)	19 (50%)	4 (11%)	7 (18%)	0 (0%)	3.74
Non-accred.	71	14 (20%)	29 (41%)	19 (27%)	8 (11%)	1 (1%)	3.66
All Programs	109	22 (20%)	48 (44%)	23 (21%)	15 (14%)	1 (1%)	3.69

Overall, there was neither agreement nor disagreement with the statement that instruction on computers has helped recent public relations graduates get good jobs. Only about one-fourth of the programs responding to the question agreed with the statement, while a

slightly greater number disagreed. About half checked the neutral position.

About one-third of the accredited programs agreed with the idea and only one in five of the non-accredited programs agreed. Both groups had about half of the respondents out of 109 usable responses selecting the middle neutral position, as indicated in Table XXXVI. There was not, however, any significant difference between the means of the two categories of programs.

TABLE XXXVI

AGREEMENT WITH THE STATEMENT THAT INSTRUCTION ON COMPUTERS HAS HELPED RECENT PUBLIC RELATIONS GRADUATES GET GOOD JOBS

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	38	4 (11%)	8 (21%)	17 (45%)	7 (18%)	2 (5%)	3.13
Non-accred.	71	2 (3%)	12 (17%)	36 (50%)	17 (24%)	4 (6%)	2.87
All Programs	109	6 (6%)	20 (18%)	53 (48%)	24 (22%)	6 (6%)	2.96

There was strong agreement among all public relations programs with the statement that the use of computers in the profession of public relations is growing rapidly. As Table XXXVII indicates, 88 percent overall agreed with the statement as opposed to 2 percent disagreement and 10 percent undecided.

There was no disagreement with the statement among accredited

programs and only 3 percent disagreement among non-accredited programs. The proportion of agreement among accredited programs (90 percent) was only slightly higher than the proportion of agreement among non-accredited programs (88 percent). Both groups had the same (10 percent) proportion of respondents who neither agreed nor disagreed with the statement, and there was no significant difference between the means.

TABLE XXXVII

AGREEMENT WITH THE STATEMENT THAT THE USE OF COMPUTERS IN THE PROFESSION OF PUBLIC RELATIONS IS GROWING RAPIDLY

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	39	12 (31%)	23 (59%)	4 (10%)	0 (0%)	0 (0%)	4.32
Non-accred.	71	19 (27%)	43 (60%)	7 (10%)	2 (3%)	0 (0%)	4.11
All Programs	110	31 (28%)	66 (60%)	11 (10%)	2 (2%)	0 (0%)	4.18

With 109 usable responses, there was neither agreement nor disagreement with the statement that employers seeking entry level public relations graduates place value on computer instruction as part of public relations education. As indicated in Table XXXVIII, only 44 percent overall agreed with the statement, while 21 percent disagreed. More than a third of the respondents took a neutral position.

Accredited programs tended to agree more (53 percent) with the

statement than did non-accredited programs (40 percent), although a greater percentage of accredited programs (26 percent) disagreed with the statement than did non-accredited programs (21 percent).

There was not, however, any significant difference between the means of the two groups.

TABLE XXXVIII

AGREEMENT WITH THE STATEMENT THAT EMPLOYERS SEEKING ENTRY LEVEL PUBLIC RELATIONS GRADUATES PLACE VALUE ON COMPUTER INSTRUCTION AS PART OF PUBLIC RELATIONS EDUCATION

	Nr.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Accredited	38	4 (11%)	16 (42%)	8 (21%)	8 (21%)	2 (5%)	3.32
Non-accred.	71	4 (6%)	24 (34%)	30 (42%)	12 (17%)	1 (1%)	2.89
All Programs	109	8 (7%)	40 (37%)	38 (35%)	20 (18%)	3 (3%)	3.03

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

General

Public relations is a diverse, rapidly growing and rapidly changing profession that is quickly adapting computers and other forms of technology to its research, planning, communication and evaluation functions.

The computer in particular has been singled out as the main force behind the myriad changes taking place in public relations practice.

Education in public relations, as in other professional fields, must be responsive to the needs of the profession, and while some educators have identified the lack of instruction in computers as a deficiency in public relations education, others have taken the opposite view.

The purpose of this study was to examine the extent of computer instruction in public relations education and the attitudes of public relations educators toward such instruction.

In addition to describing the extent of computer instruction and faculty attitudes, it was hypothesized that accredited public relations programs would generally have more extensive instruction on computers than non-accredited programs and that faculty of accredited programs would exhibit more favorable attitudes toward such instruction than faculty of non-accredited programs. Plus, it was thought that graduates

of those public relations education programs that had more extensive instruction on computers would obtain better entry-level employment.

The hypothesis that accredited public relations programs would generally have more extensive instruction on computers than non-accredited programs was not supported. While data appeared to favor accredited programs, differences were not statistically significant.

Similarly, the attitudes of faculty from accredited public relations programs did not differ significantly from attitudes of faculty from non-accredited programs concerning instruction on computers.

Nor was the hypothesis that graduates of those public relations education programs that had more extensive instruction on computers would obtain better entry-level employment supported. No significant difference was found between accredited and non-accredited programs or between programs with much computer instruction and programs with little computer instruction.

Another principal finding of this research project is that public relations programs, in general, include considerable instruction on computers for public relations majors and offer a variety of opportunities for public relations majors to gain experience on computers. Instruction and opportunities are found in public relations courses, in required journalism courses, in electives, internships, extracurricular activities, and elsewhere.

It also was found that 70 percent of public relations faculty agreed that computers are essential to the practice of public relations and 88 percent agreed that the use of computers in the profession is growing rapidly.

Accepting the importance of computers to the practice of public relations, faculty exhibited very positive attitudes toward including instruction on computers in public relations education. Overall, 85 percent agreed that instruction should be a part of public relations education, and 64 percent concurred that it should be included in public relations courses themselves, 75 percent agreed that it was proper to include such instruction in higher education, 83 percent agreed that "hands-on" use of computers is a valuable part of instruction on computers, and 65 percent concurred that extent of instruction on computers should be increased.

Summary and Conclusions

Of 179 colleges and universities with public relations programs or sequences, 68 percent responded to a survey concerning instruction on computers as part of public relations education. Thirty-two percent of the programs represented among the respondents were either accredited by the Accrediting Council for Education in Journalism and Mass Communications or were awaiting confirmation of accreditation. Data for 156 public relations educators (92 from accredited institutions and 64 from non-accredited institutions) were included.

It is interesting to note that of the accredited public relations programs, 95 percent responded, while only 81 percent of non-accredited programs responded. This might suggest that non-accredited programs were less willing to participate in a study that considered their accreditation status in relation to other factors, while accredited programs may have been more willing to report their achievements. That is, non-accredited programs may have been less willing to

participate in a study that might view their lack of accreditation in a negative light.

Because of this, findings are weighted in favor of accredited programs and faculty of accredited programs.

Titles of the administrative units housing the public relations programs varied considerably, with "journalism" -- the most popular -- used by 34 percent of the programs responding and "communications" in second place as the title of 24 percent of the respondents.

News-editorial was the most prevalent professional background of unit administrators. Overall, 43 percent of the unit administrators had news-editorial as their professional background. Among accredited programs, 55 percent of the administrators fell into this category, while among non-accredited programs only 32 percent had news-editorial background.

This is consistent with the previous finding that the most prevalent title for the administrative units that house public relations programs include "journalism" and is consistent with the tradition of including public relations education in schools and departments of journalism. Heads of journalism schools and departments are more apt to have a news-editorial journalism background.

Undergraduate programs of participating sequences averaged about 118 students, with accredited programs averaging 162 students compared to 97 for non-accredited programs. The reverse was true for graduate programs, with non-accredited programs averaging 17 students compared to 15 for accredited. Overall, graduate programs averaged about 16 students.

That accredited programs appear to have larger undergraduate

populations than non-accredited programs may be a reflection of the relative size of the institutions that offer the programs, rather than a function of accreditation status.

The reason for the apparent difference in numbers of graduate students between accredited and non-accredited programs is unclear and might require further inquiry into the nature and content of the graduate program, types of degrees offered and disciplines served.

Sixty-eight percent of the programs had a person appointed as head of the public relations sequence. Seventy-eight percent of accredited programs had such an administrator, compared to 62 percent of non-accredited programs. Twenty-nine percent of accredited programs had an intermediate administrator between the unit administrator and the public relations program head, compared to 71 percent for non-accredited programs. Overall, 55 percent of the programs reporting had such an administrator.

These findings also might be a reflection of the size of the institutions participating in the study rather than a function of accreditation status or any other factor. A program with many majors, with many major courses and fields of specialization, and with numerous service courses for non-majors logically would require a greater administrative and support structure.

Accredited programs had an average of 4.24 full- and part-time instructors compared to 2.95 for non-accredited programs. Overall, the average number of full- and part-time instructors for all public relations programs reporting was 3.43.

The greater number of instructors for accredited programs is probably a function of the greater student body size as well as a

function of the number of courses required for public relations majors in an accredited program. While it is not an absolute requirement for accreditation, studies of public relations curriculum recommend a minimum of four public relations courses for majors. The recommendation was based on a study conducted by the primary professional association in the field of public relations and by the parent organization of the journalism and mass communications accrediting committee.[1]

In a ranking of unit emphasis, public relations faculty perceived "educating undergraduate majors" as the top priority of their departments, with "interaction with the PR profession" in second place, and "educating undergraduate non-majors" last of seven functions.

Accredited and non-accredited program faculty agreed with respect to their perceptions of first and second priorities of departmental emphasis. Faculty of accredited programs ranked "educating graduate students" in third priority while non-accredited respondents put it in last place. Faculty of accredited programs put "service to the community" in fourth place while faculty of non-accredited programs perceived it in third place -- higher priority. "Applied research" and "basic research" had fifth and sixth priorities for faculty of accredited programs, and fourth and sixth respectively for faculty of non-accredited programs. "Educating undergraduate non-majors" was in last place for faculty of accredited programs, and it was in fifth place for faculty of non-accredited programs.

This perception may be a reflection of the close relationship between public relations education and the profession of public relations, as well as a reflection of the extent of professional experience of public relations faculty. Faculty with extensive

professional experience are likely to retain ties with the profession and to see professional ties as beneficial to teaching public relations students and helping them prepare for and obtain public relations employment.

That research held a relatively low priority is not unexpected in a discipline populated by faculty with extensive professional background in a field that traditionally does not understand or use research.[2]

The low rank given to educating non-majors can be seen as a reflection of the specialization and close relationship of the discipline to the profession. All journalism specializations prepare students for careers and there are few suitable "service" courses in journalism curricula.

Overall, 40 percent of faculty perceived themselves as public relations professionals while 23 perceived themselves as members of a college or university, 19 percent as teachers of public relations and 18 percent as members of an administrative unit. Generally, those with less teaching experience and more professional experience were apt to see themselves as public relations professionals.

Again, this perception may be a reflection of the close relationship between public relations education and the profession of public relations, as well as a result of the extensive professional background on the part of most public relations faculty. The perception represents the faculty's reference groups, and it is logical to conclude that faculty who had only recently left the practice of public relations or who had extensive public relations professional experience in comparison to teaching experience would be more apt to see themselves as public relations professionals in a teaching environment rather than as

teachers of public relations topics.

Sixty-two percent of the faculty members responding use or had access to a computer, and 48 percent either owned a computer at the time of the survey or had owned one at some time in the past. Thirty-four percent of the faculty responding had had formal instruction on computers at some point, but only 24 percent had ever used computers during their professional practice. There was no significant differences between faculty of accredited programs and faculty of non-accredited programs with respect to computer background and experience.

These data suggest that faculty members are reasonably well acquainted with the use of computers and generally qualified to instruct public relations majors on the uses and capabilities of computers.

Three-fourths, however, would be unable to rely on personal professional experience when discussing the role of computers in public relations practice. The finding that only a fourth had used computers during their public relations careers may be a function of when the faculty responding had served in public relations practice. The advent of computers is fairly recent.

Findings that faculty are reasonably well acquainted with the use of computers are consistent with a later finding that faculty do not perceive their lack of experience with computers as an obstacle to increasing instruction on computers for public relations majors.

There was strong agreement (85 percent) among the faculty that instruction on computers should be included in public relations education, with 94 percent of faculty from accredited programs agreeing compared to 80 percent of faculty from non-accredited programs.

Overall, there was general disagreement (65 percent) with the idea

that instruction on computers was vocational training rather than higher education. Sixty-one percent of faculty from accredited programs disagreed with the statement compared to 66 percent of faculty from non-accredited programs. Only seven percent overall, with no difference between faculty of accredited and those of non-accredited programs, thought that responsibility for computer education belonged to the PR profession rather than higher education.

There were no statistically significant differences between faculty of accredited public relations programs and faculty of non-accredited programs on these items, however.

Seventy percent of faculty concurred that computers are essential to the practice of public relations, with 82 percent of faculty from accredited programs concurring compared to 64 percent of faculty from non-accredited programs.

Overall, 88 percent agreed that the use of computers in the profession of public relations was growing rapidly. Ninety percent of faculty from accredited institutions agreed with the statement; 87 percent of faculty from non-accredited programs agreed. There was not, however, statistically significant differences between the two groups.

There was also strong agreement (83 percent) that some type of "hands-on" use of computers was important to public relations education. Eighty-nine percent of faculty from accredited programs agreed compared to 80 percent of faculty from non-accredited programs.

Only seven percent thought the lecture method of instruction was adequate. Six percent of faculty of non-accredited programs favored the lecture method, compared with only one percent of faculty from accredited programs.

Sixty-four percent felt that instruction on computers should be included in public relations courses rather than just in computer science courses. Seventy-six percent of faculty from accredited programs held this belief compared to 58 percent of faculty from non-accredited programs.

Only 49 percent, though, thought a computer science course should be required of public relations majors. Forty-nine percent of faculty of accredited programs thought this while 40 percent of faculty of non-accredited programs held this belief. Faculty of accredited and non-accredited programs did not differ significantly on these points, however.

One might have guessed that a greater percentage of faculty would have been in favor of requiring a computer science course of public relations majors, especially in view of numerous other pro-computer attitudes reported in the survey. However, there are many opportunities available for majors to learn of computers, and even if students do not take advantage of elective computer courses, it is not likely that they will escape learning of computers. As the survey indicates, there are many other opportunities for exposure.

Also, under the requirements levied by many colleges and universities and recommended by various study groups, adding a required course to a curriculum may mean dropping some other required course. Thus, lack of agreement with the statement that a computer science course should be required may be a vote against deleting some other required course and not a vote against the need for exposing majors to instruction on computers.

About 65 percent of the faculty responding agreed that the extent

of computer instruction at their institution should be increased, with a greater percentage of faculty from accredited programs (78 percent) agreeing with this statement than faculty from non-accredited programs (58 percent).

Sixty-seven percent overall identified costs as an obstacle to more computer instruction. Sixty-four percent of faculty from accredited programs agreed with costs as an obstacle while 69 percent of faculty from non-accredited programs agreed.

Thirty-three percent agreed with the idea that lack of faculty know-how was an obstacle to more instruction on computers. For faculty from accredited programs, the percentage of agreement was 30 compared to 33 for faculty from non-accredited programs.

A strong majority (87 percent) believed that their academic program was responsive to the needs of the public relations profession. Ninety percent of faculty from accredited programs believed this compared to 86 percent of faculty from non-accredited programs.

Sixty-four percent overall agreed with the idea that public relations graduates with experience in computers had an advantage over those without such experience. More faculty from accredited programs (71 percent) agreed with this idea than faculty from non-accredited programs (61 percent).

Even so, only 24 percent overall thought that computer instruction had helped graduates find good jobs, with 32 percent of faculty from accredited programs holding this belief compared to 20 percent of faculty from non-accredited programs.

Just under half (44 percent) of the respondents believed that employers seeking entry-level public relations graduates placed value on

computer instruction as part of public relations education, and 38 percent were undecided on this point. Fifty-three percent of faculty from accredited programs agreed with this point while only 40 percent of faculty from non-accredited programs agreed. Twenty-one percent of faculty from accredited programs were undecided about the value placed on computer instruction by employers, and 42 percent of faculty from non-accredited programs were undecided.

That more than a third of the faculty responding were undecided about how employers of entry-level public relations graduates perceived the value of instruction on computers as part of public relations education suggests further research on employer attitudes is needed.

Almost all programs reporting (98.2 percent) had a computer science course available to their public relations majors, but only 14 percent required such a course. All accredited programs reporting had a course available while three percent of non-accredited programs did not. Ten percent of accredited programs made a computer science course a requirement while 16 percent of non-accredited programs did.

More than two-thirds (69 percent) of the programs responding require public relations majors to take a basic journalism reporting course that includes use of word processing equipment. This is a requirement for 72 percent of accredited programs and 66 percent of non-accredited programs.

Seventy-five percent of the programs include discussion of the role of computers in their public relations courses. For accredited programs, the percentage is 95 compared to 63 percent for non-accredited programs.

About half of the programs (47 percent) discuss the role of

computers in public relations practice in other courses for public relations majors. Fifty-six percent of accredited programs include such discussion while 41 percent of non-accredited programs do.

Lecture is the principle means of imparting instruction on computers to public relations majors, but demonstration, discussion and application are also used in roughly equal proportions. A wide variety of references, texts and special teaching techniques are used to facilitate learning.

About 65 percent of the programs include "hands-on" computer experience as part of their instruction. This is consistent with an earlier finding of strong agreement that some type of "hands-on" use of computers was important to public relations education. For accredited programs, the percentage including "hands-on" experience is 77 compared to 58 percent for non-accredited programs.

Overall, 83 percent of the programs reported the availability of computer experience in internship programs for public relations majors. Eighty-six percent of accredited programs had such internships available, while 82 percent of non-accredited programs reported the availability of such internships.

Nearly all reporting (91 percent) indicated there were other opportunities -- ranging from a campus computer center to student organizations -- for public relations majors to acquire experience on computers. Roughly the same percentage held true for both accredited and non-accredited programs.

Of seven possible elements of computer instruction that might be included in programs for public relations majors, the respondents averaged between five and six elements. It was hypothesized that

accredited programs would have more extensive instructional programs on computers. No such relationship was found.

On one hand, this suggests that public relations educational programs are heavily involved in providing instruction on computers to public relations majors, with most programs incorporating a number of instructional elements. Few programs provided no opportunity to public relations majors to obtain computer knowledge.

On the other hand, these findings suggest that accredited and non-accredited programs do not differ in terms of the extent of computer instruction. While the data appeared to indicate that accredited programs offer more instruction on computers, the difference could have been due to chance. Even though accredited programs do not differ significantly from non-accredited programs on extent of computer instruction -- or even if they had -- this is a difference in quantity only, and not quality of instruction. Further, even though all aspects or elements of computer instruction were treated as being equal, they may not in fact be equal.

Entry-level positions for recent graduates were rated by experienced public relations practitioners in terms of the position's perceived benefit to beginning professionals, and it was hypothesized that graduates of accredited programs would find better employment. No relationship was found, however, between program accreditation and employment ratings.

This suggests that graduates of accredited programs have no advantage in obtaining employment over graduates of non-accredited programs. There are so many other variables, however, when it comes to obtaining employment that a failure to find a relationship between

accreditation and employment success may simply be a reflection of the inadequacy of the measuring instrument. Geographical location, number and quality of internships, success in networking, skill in job-search strategy, student motivation and aggressiveness -- all are important factors in obtaining employment. Differences in accreditation status may well have an effect, but might be overshadowed by other factors. Differences in accreditation status may be an "other things being equal" effect except in this case, other things are far from being equal.

Also, the employment rating instrument could not take into account factors such as career potential, salary, geographical location, opportunities for promotion, opportunities for networking, and similar advantages. Two entry-level positions with similar titles, similar duties and in similar organizations may differ substantially along other dimensions.

Similarly, employment ratings were compared with the extent of computer instruction in the different programs. It was hypothesized that graduates of the programs with the more extensive instruction on computers would obtain better positions. No such relationship was found.

This suggests that graduates of programs with more extensive instruction on computers have no advantage over graduates of programs with less instruction on computers. Again, there are too many other variables in this situation to conclude that extent of computer instruction has no effect on quality of employment.

There is a general lack of statistical significance in comparing responses of accredited institutions with those of non-accredited institutions. Even so, the data show a consistent tendency for

accredited institutions to be more favorably disposed toward the positive aspects of instruction on computers for public relations majors. That is to say, in almost every case where accredited and non-accredited institutions were compared on attitudes toward some aspect of instruction on computers or on the inclusion of some element of computer education in their programs for public relations majors, data for accredited institutions favored instruction on computers. Still, statistical significance was lacking.

For example, of seven questions concerning inclusion of some element of computer education in programs for public relations majors, accredited institutions had a greater proportion of responses in favor of more extensive computer education on each of the seven questions.

Of 13 Likert scale questions dealing with attitudes toward computer instruction for public relations majors, faculty responses from accredited institutions were more supportive of computer education on 12 of the 13 items. Only on the item seeking agreement with the statement that instruction on computers is vocational education rather than higher education were responses from faculty of non-accredited institutions more favorable toward including instruction on computers in public relations education.

Whether accredited or not, almost all institutions with public relations educational programs appear to be including some form of instruction on computers for public relations majors.

This appears to contradict Walker's 1981 and 1983 studies of public relations education. Instruction on technology was not included in his studies, either as something being done or as something that should be done.[3]

Similarly, the results appear to contradict a major 1975 study of public relations education that recommended a model of public relations education[4] and a 1981 re-examination of that study[5] -- neither of which recommended instruction on computers for public relations majors.

Nor did the most recent study of public relations education, which was inaugurated in 1984 and is due to be published in 1987, include instruction on computers among the top 17 essential subjects for public relations majors.[6]

There are possible reasons for these apparent discrepancies.

Walker's studies did not go beyond the basic core of professional courses required of public relations majors. He did not seek information about non-public relations courses, about the content of public relations courses, or about the equipment that might have been used in public relations writing courses, e.g., word processing equipment.

This same explanation would not seem to hold for the 1975 and 1981 studies of what should be included in public relations education, nor would this explanation suffice for the soon-to-be-published recommendations. All three studies were detailed enough to include some comment about instruction on computers for public relations majors, and the most recent study even included instruction on computers among the topics to be ranked.

It appears, therefore, that educators are including more instruction on computers for public relations majors than high level study groups of practitioners and educators have recommended.

In the cases of the most recent study, a course in computer science was included as a recommendation as part of freshman/sophomore general

education courses, and computer science was mentioned as a possible minor for public relations students where a minor is required. Computer science also was listed as a component of a business minor.

Within the public relations core, for all three studies, instruction on computers was not specifically mentioned either as a course or as content of a public relations course.

This could be a deficiency in public relations education studies, and it could be a contradiction with the recommendations of other researchers and writers. Or, it could be a function of how the role of computers in public relations education is perceived.

For example, the studies recommend that public relations majors understand the role and techniques of quantitative research in public relations practice. The studies do not say that computers should or should not be used in learning about or conducting research, but it is logical that they should be. Similarly, the studies recommend that public relations majors learn the fundamentals of journalistic writing and editing. They make no reference to the use of computers as part of that learning, yet most public relations educational programs include a writing course that involves computers as word processors.

In other words, the lack of recommendations in these studies for inclusion of instruction on computers as part of public relations education may not mean that computers do not have an important role in public relations education, but that computers are viewed as part of the process of learning how to conduct research or of learning how to write, rather than as a discrete, identifiable unit of instruction that is to be mastered, or as an end in itself.

Computers in public relations education are means to an end; they

are components of the process and aids to accomplishing public relations objectives. Computers are not so much a part of the content of higher education in public relations as they are essential parts of the process of public relations problem solving that students need to learn about.

Indeed, instruction on computers for public relations majors will be most relevant and most effective when it is integrated totally into the regular curriculum rather than being treated as outside courses or peripheral topics.

Ernest Boyer, 1984 president of the Carnegie Foundation for the Advancement of Teaching, wrote that computers and other forms of technology must be linked to educational objectives and become part of the educational process, rather than distinct areas of study. Students in higher education must learn about computers and the impact they are having, they must learn with computers in the sense that they use computers to accomplish other tasks, and they must learn from computers in an interactive process.[7]

Several of the faculty members participating in this study expressed some concern over the role of computers in public relations education. One respondent expressed fear that the study was the first step in building a case for including "computer skills" in public relations education, and the faculty member pointed out that public relations education should not be that technical or skill-oriented.

Another emphasized that since they did not teach college students how to use a typewriter, they saw no need to teach them how to use a computer. Both were considered "vocational skills" that were inappropriate for higher education.

The question of what constitutes "instruction on computers" is a

complex one. Results of this study indicate that it can mean a variety of things, ranging from a lecture about the role of computers in the practice of public relations to "hands on" use of computers to accomplish public relations tasks.

The issue is what constitutes instruction on computers for public relations majors and what constitutes minimal computer literacy for entry-level public relations practitioners.

Perhaps a better term than "computer literacy" is "computer competency" which is "an awareness and openness about present and future applications of computers to specific job settings."[8]

Perhaps public relations educators need a clear policy statement concerning what it is that public relations majors need to know about computers. For example, perhaps something is needed like the Statement by the Policies Commission for Business and Economic Education which says that a computer literate person:[9]

- Understands the computer's capabilities and limitations.
- Demonstrates a fundamental knowledge of computers and their effects on society.
- Communicates with others using computer vocabulary.
- Operates the computer effectively.
- Accesses information in the computer.
- Inputs information with speed and accuracy using keyboard skills.
- Uses the computer as a tool for solving problems.
- Knows how computers can improve decision-making.

Similarly, the National Business Education Association wrote that to be computer literate, business students should be able to:[10]

- Trace the historical development of information processing.

- Define fundamental computer terminology.

- Explain how information is processed by a computer system.

- Describe the impact of computer technology on industry, business, government and the individual.

- Identify current trends and issues dealing with computer technology.

- Recognize how the computers may be used as a management tool.

- Select, evaluate and use appropriate software packages for problem solving.

- Use a computer for household records, management, personal correspondence, and similar home applications.

- Operate the computer keyboard and 10-key pad by touch.

- Write simple programs in Basic or other appropriate languages.

For an individual to function in an information processing occupation, they should be able to:

- Decide when computer use is appropriate.

- Use the computer to solve problems.

- Prepare data for input into a computer system.

- Verify the accuracy of input data.

- Use computers to record, process, communicate, store and retrieve data.

- Interpret computer-generated reports.

While it is not being suggested that public relations educators and professionals necessarily adopt these statements of competency, the statements are examples of what should be developed if public relations education is to progress in the most appropriate direction.

Recommendations for Further Study

The results of this study have identified a number of areas that warrant further research.

This research focused on the attitudes of public relations faculty toward instruction on computers. Since public relations education is closely tied to and responsive to the needs of the public relations profession, it is important that educators have a better understanding of the expectations and attitudes of public relations professionals toward including instruction on computers in public relations education. The research indicated that many faculty were uncertain of the value placed on the computer knowledge of public relations graduates by prospective employers, and this information would be essential to putting instruction on computers in public relations education in perspective.

A useful research project might consist of a survey of public relations professionals to learn what they expect of public relations graduates and to determine how much they value knowledge of computer operations on the part of entry-level practitioners.

It is not only important that educators understand the value of computer knowledge for entry-level public relations practitioners, but it is important to have a better understanding of what computer knowledge and experience is vital at other public relations career levels. Thus, it is important to understand what is expected of entry-level practitioners, but equally important for educators to understand what will be required of graduates later in their careers. Public relations education should provide a sound base for continuing education and professional development. A study of computer use and knowledge

required beyond the entry level would be very important to public relations educators.

Public relations is not the only field that is experiencing rapid change as a result of computers. Advertising, journalism, education and marketing are fields similar to public relations that use computers and include instruction on computers in their educational programs.

Another useful study would be to examine course content, requirements and teaching methods in these similar fields and tailor their ideas to public relations education.

An excellent way for public relations majors to learn of the role and capabilities of computers in public relations practice would be to include the use of computers in public relations education. A useful study would be to identify the areas in public relations education where computers and other new technology can be applied in ways that extend human abilities and make possible the accomplishment of new tasks as well as the more efficient accomplishment of old tasks.

A study that could identify for public relations educators the hardware, software, reference materials and teaching strategies for using computers effectively in graphic design, publication design, campaign planning, project management, survey research, speech and script writing, and a wealth of other areas of education, would be very valuable.

Another area of importance to educators that deserves further inquiry is the skills and knowledge educators should have to effectively acquaint public relations majors with the uses of computers in public relations practice. What is it that public relations faculty need to know in order to bring public relations students up to a

satisfactory level of computer literacy?

While only a third of the faculty surveyed indicated that faculty competence was an obstacle to increasing the extent of computer instruction at their institutions, that is still a substantial obstacle. A useful study would be one that identified what it is public relations faculty need to know about computers and how they might obtain that knowledge. Instructional programs, workshops, texts and other references, and other sources for faculty development could be identified.

Public relations graduates find employment in a variety of organizations -- government at all levels, business and industry, the mass media, nonprofit organizations, associations, public relations agencies -- and most of these organizations use computers in many different ways. A valuable study would be to identify the ways in which organizations that public relations graduates will be a part of use computers, and include that information in public relations education. That is, what is it that new public relations practitioners need to know about the non-public relations uses of computers in order to function and interact satisfactorily on an organization's staff? How do others use computers that impact on what public relations people do?

Still another area for research is to identify what it is that public relations practitioners need to know about computers and other technology. What constitutes adequate knowledge of computers and other technology for entry-level public relations people? What is it they need to know at entry level and later? What is a "computer literate" public relations graduate/practitioner?

About two-thirds of the faculty responding to the survey indicated

that while programs of instruction on computers at their institutions needed to be expanded, costs were an obstacle to such expansion. A useful study would one that identified ways of purchasing or otherwise obtaining computer equipment and software, types of equipment and software of most benefit to computer instruction for public relations majors, sources of grants, used equipment and instructional aids.

A useful study would be one that would examine the status of instruction on computers periodically. A longitudinal panel study that examined the same respondents periodically for changes in their programs, course requirements, use of special texts and techniques, would be of benefit to public relations educators and professionals.

In this study, only minor differences were found between accredited and non-accredited public relations programs on the characteristics examined. Accredited programs and those awaiting accreditation represented about 22 percent of the respondents. Of the 71 non-accredited programs participating, 30 percent indicated they intended to seek accreditation; 20 percent were undecided and 51 percent said they did not intend to seek accreditation.

A useful study would be to examine the benefits of accreditation and the reasons why some programs do not seek accreditation. Obstacles to obtaining accreditation need to be examined, and the effects on students need to be examined as well. It may be that accreditation aids in recruiting students or attracting alumni and financial support; it may be that accreditation aids students in finding better employment either because they are products of an accredited sequence or because of the scope and quality of education provided by an accredited program. Or, none of these may be advantages of accreditation.

Additional research might identify other areas of technological impact on the practice of public relations; i.e., how is the practice changing as a result of new technology. This is not just a listing of new technology available or who-is-using-what, but an examination of changes being wrought. While some say we are undergoing a technological revolution, the real changes will be social and cultural and it is the impact rather than the causes of change that deserve most emphasis. If public relations focuses on the relationships between organizations and people, then research must seek answers to questions about how those relationships are changing as a result of new technology, and thus how public relations will or should change.

In Conclusion

If one agrees that computers have -- and will continue to have -- an important role in the practice of public relations, then computers should have an important role in education for public relations.

The literature in public relations practice supports the role of computers, and the opinions of public relations educators support the need for including instruction on computers for students of public relations.

While there seems to be a measure of agreement on numerous issues concerning instruction on computers for public relations majors, there are many questions that need to be answered and many problems that need to be solved.

More than many disciplines, public relations education has been the topic of numerous studies and commissions and the subject of considerable debate. This attention is healthy and should continue if

education is to meet the needs of and improve the quality of performance in the public relations profession.

The field has more than its share of "task forces" -- including several dealing with new technology and several dealing with education, but none dealing with both. It is time that attention be focused on the need for including instruction on technology in education or chances for professional success by public relations graduates may be reduced.

Helping public relations students become comfortable with technology in a field that is basically a "people business" will not be easy. Educators have a difficult task.

Phillip Lesley, called by some a "senior spokesman" for the field, said that public relations people are basically idea-oriented and have considerable difficulty adjusting to technological change. Public relations people are uncomfortable with technical and mechanical things, he said.[11]

Even so, students will have to learn about technology in general and computers in particular to effectively practice public relations. As panelists at the national "Business Tomorrow XI" conference in 1986 pointed out:

> The ability to act within a range of uncertainty and built-in flexibility is paramount for anyone who aspires to be instrumental in future changes in any field. Research, technology, information, and education are elements in the compound. The mix depends on leadership for its optimal strength and resiliency -- leadership and a will to accommodate uncertainty and forge ahead to secure America's position in a changing world.[12]

ENDNOTES

[1]A Design for Public Relations Education, The Report of the Commission on Public Relations Education (New York: Foundation for Public Relations Research and Education, Inc., 1981), p. 8.

[2]Scott M. Cutlip, Allen H. Center and Glen M. Broom, Effective Public Relations, 6th ed (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1986), p. 201.

[3]Albert Walker, Status and Trends in Public Relations Education in U. S. Senior Colleges and Universities, 1981 (New York: Foundation or Public Relations Research and Education, Inc., 1981); and Albert Walker, "Public Relations Education," Public Relations Review X (Spring 1984).

[4]A Design for Public Relations Education, The Report of the Commission on Public Relations Education (New York: Foundation for Public Relations REsearch and Education, Inc., 1981).

[5]Kenneth Owler Smith, "Report of The 1981 Commission on Public Relations Education, "Public Relations Review VIII (Summer 1982).

[6]"Practitioners & Educators Now Agree on What PR Students Need to Learn," PR Reporter 29 (February 3, 1986), p. 1.

[7]Ernest L. Boyer, "Education's New Challenge," Personal Computing 8 (September 1984), p. 81-85.

[8]Joyce E. Killian and Robert L. Killian, "Computer Competency -- Tailoring Inservice to Professional Needs, 7 Lifelong Learning (September 1983), p. 21-23.

[9]"This We Believe About Computer Literacy -- A Statement by the Policies Commission for Business and Economic Education (1984)" Business Education Forum 39 (October 1984), pps. 9-10.

[10] "A Focus on Computer Literacy -- A Statement By The National Business Education Association," Business Education Forum 39 (October 1984), pps. 5-6.

[11]Fred A. Woodress, "Public Relations Plans for '85." Editor & Publisher (January 19, 1985), pps. 26-29.

[12] Natalie Billon, "Toward Tomorrow: The Impact of Change," Business Today 23 (Winter 1986), pps. 11-12.

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APPENDIX A

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Denton, TX 76201

Director, Journalism Program
Division of English, Foreign Languages and Journalism
Sam Houston State University
Huntsville, TX 77341

John Gartley, Director
Center for Communication Arts
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Heber Taylor, Chair
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Charles Arrendell, Chairman
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Arlington, TX 76019

Maxwell E. McCombs, Chair
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Doug Newsom, Chair
Department of Journalism
Texas Christian University
Fort Worth, TX 76129

Billy I. Ross, Chairman
Dept. of Mass Communications
Texas Tech University
Lubbock, TX 79409

Michael Sewell, Chairman
Department of Mass Communication
Texas Wesleyan College
Fort Worth, TX 76105

Philip E. Isett, Director
Dept. of Language, Literature and Journalism
West Texas State University
Canyon, TX 79016

Ralph D. Barney, Chair
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Provo, UT 84602

Robert K. Tiemens, Chairman
Department of Communication
University of Utah
Salt Lake City, UT 84112

James Derry, Head
Department of Communication
Utah State University
Logan, UT 84322

Anne M. Cooper, Coordinator
Mass Communications Program
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Staunton, VA 24401

Head
Department of Journalism
Norfolk State University
Norfolk, VA 23504

Mary B. Gallagher, Chairperson
Department of Journalism,
Speech Communication
Radford University
Radford, VA 24142

George T. Crutchfield, Director
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Virginia Commonwealth University
Richmond, VA 23284

Kenneth Rystrom, Head
Communications Studies
Virginia Polytechnic Institute
and State University
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Gary L. Atkins, Chairman
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Thomas H. Heuterman, Chair
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Harold C. Shaver, Chairman
Department of Communications
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Bethany, WV 26032

Deryl R. Leaming, Director
W. Page Pitt School of
Journalism
Marshall University
Huntington, WV 25701

Guy H. Steward, Dean
Perley Isaac Reed School of Journalism
West Virginia University
Morgantown, WV 26506-6010

Sharon M. Murphy, Dean
College of Journalism
Marquette University
Milwaukee, WI 53233

James L. Hoyt, Director
School of Journalism
University of Wisconsin
Madison, WI 53706

Gary Coll, Chairman
Department of Journalism
University of Wisconsin --
Oshkosh
Oshkosh, WI 54901

M. F. Christopherson, Chair
Department of Communication
University of Wisconsin -- Stevens Pt.
Stevens Point, WI 54481

William J. Roepke, Head
Department of Journalism and
Telecommunications
University of Wyoming
Laramie, WY 82071

APPENDIX B

LIST OF INSTITUTIONS WITH ACCREDITED PROGRAMS

University of Alabama
The American University
Ball State University
Bowling Green State University
Brigham Young University
California State University, Fullerton
California State University, Fresno
Colorado State University
Drake University
University of Florida
Florida A & M University
University of Georgia
Kansas State University
Kent State University
Marshall University
University of Maryland
Memphis State University
Northern Illinois University
Ohio University
Ohio State University
University of Oklahoma
Oklahoma State University
University of Oregon
St. Cloud State University
San Diego State University
San Jose State University
University of South Florida
University of Southern California
Syracuse University
Temple University
University of Tennessee
Texas Tech University
University of Texas at Austin
West Virginia University

APPENDIX C

SURVEY INSTRUMENT COVER LETTER

Dear Colleague:

Please give the attached questionnaire to the public relations faculty member most knowledgeable about the content of public relations education at your institution.

The questionnaire asks for information on computer instruction available to public relations majors, and is part of a doctoral dissertation dealing with public relations education.

Your cooperation is needed; failure to return the completed survey by the deadline will detract from the value of the study to public relations educators.

All data collected will be reported in compiled form and the information reported by your institution will not be revealed as coming from you. The code number on the questionnaire is for keeping track of responses and will be removed upon receipt of the questionnaire.

A copy of the summarized findings of the study will be sent to participants who request a copy by separate letter.

Please return the completed questionnaire in the enclosed postage-paid envelope by October 31, 1986. Refer questions or problems to:

Professor Charles A. Fleming
School of Journalism & Broadcasting
Oklahoma State University
Stillwater, OK 74078-0195
(405) 624-6354

Sincerely,

Charles A. Fleming

APPENDIX D

COVER LETTER FOR FOLLOW-UP

Dear Colleague:

In late September I sent you a questionnaire about computers in public relations education and have not yet received it back. As a faculty member myself, I understand the obligations on you and members of your unit. Yet, I very much hope a member of your public relations faculty will take the time to complete the questionnaire and return it to me as soon as possible. The study addresses an important issue in public relations education and also contributes to my dissertation. If you have any questions, please contact lme at the School of Journalism & Broadcasting, Oklahoma State University, Stillwater, OK 74078-0195. Telephone: (405) 624-6354.

Another questionnaire and another stamped return envelope are enclosed for your use. Please complete the questionnaire and return it soon. Thank you.

Sincerely,

Charles A. Fleming
Assistant Professor

APPENDIX E

POSTCARD FOLLOW-UP

Dear Colleague:

Want to do something for public relations education? Want to find out something about instruction on computers in PR education? Want to help a struggling colleague? Then please complete and return the questionnnaire I sent to you in late September, and a follow-up copy a few weeks later. If you have any questions, please ask them. Professor C. A. Fleming; School of Journalism & Broadcasting; Oklahoma State University; Stillwater, OK 74074-0195. (405) 624-6354.

APPENDIX F

SURVEY INSTRUMENT

SURVEY OF COMPUTER INSTRUCTION IN PUBLIC RELATIONS (PR) EDUCATION

This questionnaire seeks information on computer instruction for PR majors and is part of a doctoral dissertation. The questionnaire should be completed by the PR faculty member most knowledgeable about the content of PR education at your institution.

All data will be summarized. Information from your school will not be revealed as coming from you. The questionnaire code number helps keep track of responses and will be removed upon receipt of the questionnaire. A copy of the findings will be sent to participants who request a copy from the person identified below.

Your cooperation is needed; failure to return the completed survey by the deadline will detract from the study's value to educators. Please return the completed questionnaire by October 31, 1986, in the enclosed postage-paid envelope. Refer questions to: Professor C. A. Fleming; School of Journalism & Broadcasting; Oklahoma State University; Stillwater, OK 74078. (405) 624-6354

SECTION I

1. Are PR majors required to take a basic journalism reporting course that includes using word processing equipment? Yes____ No____

2. Please list the titles of PR courses required of PR majors:

3. Do PR majors have a computer science course available? Yes____ No____ (Either within or external to your department.)

As a required course? ____ As an elective? ____ b. If "yes," title and department:

_____

4. Is a discussion of the role of computers in public relations practice included in your PR courses? Yes____ No____ If "yes," in what courses:

a. How is such instruction imparted: Lecture? ____
Demonstration?____ Discussion?____ Application?____
Other? _____

5. Is a discussion of the role of computers in PR practice included in other required or elective courses for PR majors? Yes____ No____ If "yes," in what courses?

6. Is any "hands on" computer experience included in instruction for PR majors? Yes____ No____ If "yes," in what courses?

7. Are there other opportunities for PR majors to work with computers as part of their education? Yes____ No____ If "yes," please identify:

8. Is experience with computers available to students through internships (with PR professionals) sponsored/coordinated by your department? Yes ____ No ____

9. What references, texts or special teaching techniques do you use to impart instruction on computers to PR majors in PR courses? (Please attach separate sheet if necessary.)

10. Please indicate the types of positions and organizations where your most recent top five PR graduates obtained employment.

SECTION II

Indicate agreement or disagreement with statements below by circling one abbreviation (only one) for STRONGLY AGREE (SA), AGREE (A), UNDECIDED (U), DISAGREE (D), or STRONGLY DISAGREE (SD).

1. Instruction on computers should be included in PR education.

SA A U D SD

2. Instruction on computers is vocational training rather than higher education.

SA A U D SD

3. Instruction on computers is properly the responsibility of the PR profession and not higher education.

SA A U D SD

4. Computers are essential to the practice of public relations.

SA A U D SD

5. Hands-on use of computers is important to PR education.

SA A U D SD

6. Instruction on the role of computers in PR can be accomplished adequately by lecture-explanation alone.

SA A U D SD

7. Our public relations program is responsive to the needs of the profession.

SA A U D SD

8. Instruction on computers should be included in PR courses rather than just in computer science courses.

SA A U D SD

9. A computer science course should be required of all PR majors.

SA A U D SD

10. Cost is an obstacle to more instruction here on computers for PR majors.

SA A U D SD

11. Lack of faculty computer know-how is an obstacle to more instruction here on computers for public relations majors.

SA A U D SD

12. The extent of instruction on computers here for PR majors should be increased.

SA A U D SD

13. PR graduates with experience in computers have an advantage over PR graduates without that experience.

SA A U D SD

14. Instruction on computers has helped our recent PR graduates get good jobs.

SA A U D SD

15. The use of computers in the profession of PR is growing rapidly.

SA A U D SD

16. Employers seeking entry level PR graduates place value on computer instruction as part of PR education.

SA A U D SD

SECTION III

1. Is your PR sequence accredited by ACEJMC? Yes____ No____

2. If your PR sequence is NOT accredited:

a. Has your sequence ever been accredited? Yes____ No____ Don't Know ____

b. Have you ever sought accreditation? Yes____ No____ Don't Know____

c. Do you intend to seek accreditation? Yes____ No____ Undecided____

3. Number of PR majors: Graduate____ Undergraduate____

4. Number of PR instructors: full time:____ part time:____

5. Title of department or school that houses the PR sequence:

_____

6. What is the professional background or specialization of your overall department (or comparable administrative unit) head?

___ News-editorial ___ Broadcasting ___ Advertising

___ Public Relations ___ Other: _____

7. What is the professional background or specialization of the intermediate administrator (if there is one) between the PR sequence and the overall department head?

___ Not Applicable ___ News-editorial ___ Broadcasting

___ Advertising ___ Public Relations ___ Other:

8. Is someone appointed head or coordinator of your PR program? Yes___ No___

The next eight questions should be answered by PR faculty members individually. Answer sheets are attached for respondents other than yourself.

ANSWER SHEET-- PR Instructor #1 (Your Title:_____)

1. Are you a part time or full time PR instructor? (Circle one)

2. Years of professional PR experience:___ Years of PR teaching experience: ___ Years in present teaching position:___

3. Do you now or have you ever owned a personal computer? Yes____ No____

4. Do you use or have access to a computer at your workplace? Yes____ No____

5. As a PR professional, did you regularly use a computer? Yes____ No____

6. Have you ever had formal instruction on computers? Yes____ No____

7. Do you usually think of yourself mainly as: (mark one)

____ College/University Member ____ Department Member
____ Teacher of PR ____ PR Professional Teaching PR

8. In your department, how much emphasis is placed on each of the following: (1: Very Great Emphasis 2: Great Emphasis 3: Some 4: Slight Emphasis 5: None)

___Educating Graduate Students
___Educating Undergraduate Nonmajors
___Interaction with the PR Profession
___Service to Business & the Community
___Educating Undergraduate Majors
___Basic Research
___Applied Research

PLEASE REMEMBER TO MAIL THE COMPLETED SURVEY BACK AS SOON AS POSSIBLE.

THANKS!

Note: additional copies of the above answer sheet were provided to accommodate programs with more than two full- or part-time public relations faculty members.

APPENDIX G

EMPLOYMENT RATING INSTRUMENT

RATING ENTRY-LEVEL PR JOBS

On a recent nationwide survey of PR educators, the following were listed as types of **entry-level** public relations jobs. Of course, graduates are thankful for any job they find, but some positions are more desirable than others in terms of overall benefit and potential for a career in PR.

Please help me rate these PR positions in terms of overall desirability for entry-level PR graduates. Based on your personal experience please rate each position on a scale of 1 to 5, with **1 meaning "not desirable"** and **5 meaning "very desirable."** Positions are categorized by type, but not listed in any other particular order.

Granted, there are many other factors that are important for rating PR positions, but please respond from a "generally speaking" viewpoint.

Put a number, from 1 to 5, in the blank opposite each type of PR job and please return this scale to me as soon as feasible. Thanks for your help.

Chuck Fleming
School of Journalism & Broadcasting
Oklahoma State University
Stillwater, OK 74074

TYPE OF ENTRY-LEVEL PR JOB	RATING: 1 TO 5
AGENCIES	
Small (Community) PR Agency	_____
Medium (Major City) PR Agency	_____
Major (National) PR Agency	_____
Medium (Major City) Advertising Agency	_____
Major (National) Advertising/PR Agency	_____
CORPORATE & RETAIL	
Major Corporation PR Staff	_____
Medium Corporation PR Staff	_____
Medium Corporation Marketing Staff	_____
Medium Corporation Sales Staff	_____

Small Corporation PR Staff ..... _____
Regional Airline PR ..... _____
Retail Store Sales ..... _____
Retail Store Advertising ..... _____
Major City Savings & Loan Promotions ..... _____
Major City Bank Promotions/Marketing ..... _____
Major City Brokerage Firm Marketing ..... _____
District Headquarters, Major Retail Chain PR ..... _____
Hotel Marketing (Medium City) ..... _____
Regional Railroad Marketing ..... _____
Regional Public Utility PR ..... _____

GOVERNMENT & EDUCATION

City Government Public Information (Medium City) ..... _____
School District Public Information ..... _____
Aide to U. S. Senator ..... _____
U. S. Armed Forces Public Information ..... _____
State Assembly Publications Editor ..... _____
University Public Information ..... _____
University External Relations ..... _____
Medical College Information ..... _____
Political Campaign Staff (State) ..... _____
College Publications Editor ..... _____
Medium City Convention Director ..... _____
Major City Metro Transportation Authority ..... _____

MASS MEDIA

Newspaper Reporter ..... _____
Radio Station Promotions ..... _____
TV Station Promotions ..... _____
Network News Desk ..... _____
Editor, Local Magazine ..... _____
Copyeditor, Book Publisher ..... _____
Cable TV (National) Promotions ..... _____
Newspaper Advertising Department ..... _____
Major Movie Studio Promotions ..... _____
Regional Newsletter Editor ..... _____

NON-PROFIT

Museum Promotions ..... _____
Theatre Promotions ..... _____
City YMCA Promotions ..... _____
Major City Hospital Community Relations ..... _____
Small City Hospital PR ..... _____
State Professional Association PR ..... _____
National Health Association PR ..... _____
Entertainment (City) Promotions ..... _____
Regional Trade Association PR ..... _____
Fundraising, City Charities ..... _____

OTHER

Chamber of Commerce PR, Medium Community ..... _____
Market Research Firm ..... _____
Trade Center Staff, Major City ..... _____
Board of Trade Staff, Major City ..... _____

THANKS FOR YOUR HELP!

PLEASE RETURN THIS FORM AS SOON AS YOU CAN.

VITA

Charles Arthur Fleming

Candidate for the Degree of

Doctor of Education

Thesis: A SURVEY OF INSTRUCTION IN COMPUTER USE IN PUBLIC RELATIONS PROGRAMS IN SCHOOLS AND DEPARTMENTS OF JOURNALISM

Major Field: Higher Education

Biographical:

Personal Data: Born in Milwaukee, Wisconsin, October 8, 1937, the son of Mr. and Mrs. Paul V. Fleming.

Education: Graduated from Clover Park High School, Tacoma, Washington, in June 1955; received Bachelor of Science degree in Psychology from the University of Washington in 1959; received Master of Arts in Journalism from the University of Wisconsin in 1972; completed requirements for the Doctor of Education degree at Oklahoma State University in July, 1987.

Professional Experience: Commissioned Officer, U. S. Marine Corps, 1959-82; (Director of Public Affairs, Marine Corps Development and Education Command, 1972-1976; Director of Public Affairs, Fleet Marine Force Atlantic, 1976-1980; Director of Public Affairs, Marine Corps Reserve, 1980-82;) Assistant Professor, Oklahoma State University, School of Journalism and Broadcasting, 1982-87.