

Profs, Professionals Agree About Students' Editing Skills

by Frank Fee, John Russial and Ann Auman

Professors and professionals agree that text editing, headline writing and design are fundamental and crucial skills. Professors, however, think students need a wider variety of skills.

News editing has undergone several waves of substantial change in the last 25 years. The most obvious has been technological. Computer editing, pagination and digital imaging, which were barely a dream 30 years ago, are tools of the trade today.

Organizational change is a more recent development. Among its manifestations are design desks, newsroom teams and maestro approaches, as well as increased awareness of the need for better leadership and people skills.

The growth of online media has spawned a third area of considerable ferment, one that has quickened in the last year or two. Aspects of this change are the integration of print and Web staffs, the introduction of multimedia coverage by newspapers and convergent newsroom experiments.

Journalism educators who prepare students to enter the world of news editing have been watching these changes for decades with a mixture of fascination and trepidation. Hitting a moving target is always a challenge, but to stretch a metaphor, journalism educators feel they have to hit the old targets at the same time they're shooting at the one or more in motion.

How should journalism education address these changes? The continuum is broad—from retreating to the basics of copyediting and headline-writing and

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letting industry handle the rest to going one better than industry and experimenting with new curricular forms to meet a multimedia world. Courses already are jammed with training in traditional skills, skills that most would agree remain crucial.¹ The questions are fairly simple but the answers complex: How much technology should we teach or expect students to learn by themselves? A lot, a little or none? What does the industry want, and is it appropriate to expect journalism programs to provide it? Do journalism programs have the resources—human and financial? Can they go too far too fast? If journalism programs jump wholeheartedly into multimedia education, are they running the risk of creating the 21st century equivalent of a videotext curriculum?

Another way to phrase the question is as follows: Where should journalism educators focus when they design editing curricula? Should they teach skills from the past and present, should they try to predict and prepare for the future or all of the above? There has long been a belief that the industry is closer to the cutting edge of innovation because it has access to more expertise and the latest technology. Is that belief supported by data? Which group, for example, is more inclined to say multimedia skill is important?

This study, which is based on a survey of ACEJMC-accredited programs, examines what professors say is important for students to know about editing. It also compares what professors at accredited programs say about necessary skills with what professional copy editors say is important. The issue that lies beneath the surface of many such discussions is where the academy should be. Should it lead the industry or follow? It is difficult to begin to answer that question without a clear sense of where the academy is now in the teaching of copy editing skills.

Background

For some in the academy, the question of which skills to teach is overshadowed by another: Should journalism and communication programs continue to emphasize professional skills that prepare students for jobs in traditional media industries, or should they focus their energies elsewhere? This criticism takes different forms; one version holds that journalism and communication programs should pay much less attention to practitioner skills training because of its vocational nature. Instead of ensuring that students will have industry-specific entry-level skills, schools should concentrate on conceptual and critical issues. The University of North Dakota's School of Communication, for example, "abandoned a subservience to career tracks in favor of a curriculum organized around significant communication issues."² Blanchard, Christ and others have made similar arguments in favor of an integrated curriculum that focuses far less on practitioner skills and more on communication issues and critical-thinking abilities.³

Others disagree. Medsger, for example, argues that professional coursework remains crucial and itself is liberal in focus because it emphasizes critical thinking and other hallmarks of a liberal education.⁴ A recent study by Dickson and Brandon found that professionals and professors disagreed that journalism programs should move from industry-oriented sequences to more general mass media studies.⁵ Christ and Hynes, in a study of mission statements collected in late 1995, indicated that many, if not most, journalism and communications programs attempted to strike a balance between professional preparation and liberal arts education.⁶ "It is clear," they wrote, "that many programs embrace the idea that media education involves preparing a liberally educated professional."⁷

A second broad criticism of skills training is that it typically is too narrowly focused for a changing media world.⁸ Some media educators look to the idea of media convergence to support an argument that industry-specific training is anachronistic and that students need to develop skills they can apply in various media environments. In 1993, for example, Rakow said that "technologies, media industries and careers are changing so rapidly and in such unpredictable directions that preparing students for today's media occupations is shortsighted and ill-advised."⁹ More recently, Pavlik argues that new digital media present "a fundamental challenge to journalism education" and that to work effectively in the new media era, journalists will need to be comfortable with text, audio, video and interactivity.¹⁰ Outing, who writes a popular online column about the online news industry, says that because newsrooms of the future will publish to different media, "Reporters, obviously, will have to master using new devices to communicate, collect news and do research." But, he adds, "...It's editors whose jobs will change the most ... tomorrow's editors will foremost have to understand how content must be presented appropriate to each medium."¹¹

In October 2000, the first of five recommendations of the subcommittee on educational technology of the AEJMC task force on journalism and mass communication at the millennium took a similar position with respect to journalism education. It said that programs should "work toward re-conceptualizing and re-organizing their curricula to emphasize cross-media JMC education, rather than media-specific education." The report also points out that "a growing number of leading JMC educators and JMC professionals are increasingly convinced that the approach proposed here makes sense and will likely produce the types of JMC professionals the industry will need in the years ahead."¹²

It is clear that the development of online journalism has created a demand for newswriters who have new skills, particularly in HTML and digital image processing. It is less clear whether much demand exists in online news media for convergence skills such as video.¹³ Within the last five or more years, many universities have created new-media classes or even new curricula that attempt to provide students with a more broad-based set of skills.¹⁴ Recent reports of convergence experiments within traditional news media industries also have

raised suggestions that traditional training of journalists may not meet industry needs for long. Recently, *The New York Times* publisher Arthur Sulzberger Jr. added his voice to those preaching convergence:

“Whether it is the printed pages of the paper or the digital realm of the Internet, in magazines or books, on television or radio, we have become single-minded in our efforts to reach this knowledge-hungry audience, regardless of the means of distribution.”¹⁵ Several newspapers that have experimented with multimedia reporting and editing have been featured in trade journal articles.¹⁶ The experiments of several major news organizations to create linkages between print and television stations within a common newsroom have been widely reported, though the level of actual integration of staffs has not been great.¹⁷ Such experiments also have been the focus of much discussion at professional and academic conferences, such as AEJMC, prompting calls for multimedia training of students.

On the whole, though, beyond anecdotes, speeches at conferences and position statements, there has been little evidence to suggest that journalism students are ill-served by traditional sequence-based curricula, much less to support the idea of a wholesale turning-away from industry-specific education. Indeed, there is evidence many online journalists have been drawn from the ranks of print, and online startups have done well luring talent from traditional newspapers.¹⁸

In the academy, this debate about sequence separation vs. integration is likely to continue against the backdrop of the continuing development of online journalism and other forms of media convergence.

Newspaper Industry Issues

Focusing more narrowly on the newspaper industry, several studies have indicated that industry-specific skills remain in great demand, particularly for editors.

A study by Auman and Alderman found general agreement between editors and educators on what skills were important for new copyediting hires to have.¹⁹ Both groups ranked traditional word editing skills most important. Auman reported in an earlier study that editors did not believe that new hires had adequate preparation; they felt entry-level hires were deficient in traditional editing skills, page design and general knowledge.²⁰

Technology skills appear to have grown in importance throughout the 1990s, which is no surprise, given the increasing reliance on computers for page design and photo handling in the mid-1990s. Russell found a substantial discrepancy between what skills editors said were important in an APME survey and what skills newspapers sought in job advertisements. Editors ranked technology skills relatively low and critical thinking abilities very high in the APME survey, but job descriptions for copyeditors were largely silent

about critical skills and made it clear that very specific skills, such as Quark pagination, were quite important and becoming more so.²¹

There is additional evidence that technology skills have become important in newsroom hiring. In a survey of photo editors in 1998, Russial found that specific technology skills, such as knowledge of Photoshop and negative scanning, were considered nearly as important for new hires as traditional photography skills but that convergence skills, such as video, were considered extremely unimportant.²² Have technology skills become as important for copyediting hires?

Besides facing technological upheaval, many newspapers have experienced other institutional changes in the last decade, and some of those changes may mean that editors will need to develop new skills. These include the movement to newsroom teams and team-like structures,²³ cross-training of editors,²⁴ the growth of design desks²⁵ and a general re-emphasis on management, leadership and working together.²⁶ These issues have been discussed in trade journals and in several academic studies, and they remain popular topics at national conferences, such as those of the American Copy Editing Society and Society of News Design. Taken together, these innovations suggest that new hires may need new organizational competencies and people skills. Are these newer skills as important as traditional skills?

Professors of editing know about these organizational changes in the industry, but they already are puzzling over how to cram traditional and technological skills into their classes, not to mention training in multimedia. Editing teachers can perhaps be forgiven if they occasionally wonder just which of the many aspects of editing they need to teach and how much time they need to spend on them. Previous research has indicated that there's a need for more than one editing course – one basic and one on advanced skills, such as layout and design, visual journalism and coaching writers. Schools that have added this course or one in design have taken some of the pressure off the basic editing

The need for word editing skills is long established, and whatever form news presentation takes, those skills no doubt will remain crucial.

course, but with convergence, the pressure is on again to figure out how to incorporate editing for the Web and Web design skills.²⁷

Research Questions

RQ1:

How much time do copy editing professors spend on traditional editing, headline-writing and design skills, which one might think of as skills from the past (though still necessary for the present and presumably for the future)?

RQ2:

Is there much time for other types of training, such as technology and organizational skills, the need for which has been articulated in the trade press more recently?

RQ3:

Are professors responsive to future trends relating to media convergence?

RQ4:

Is there overall agreement between professors and professionals on necessary skills?

RQ5:

Do the skills break into discrete bundles, and if so, do professors and professionals place the same skills in the same bundles?

RQ6:

If not, what are the key differences? Is there a difference based on size of paper?

Method

Surveys targeted the principal editing instructors at 109 accredited journalism programs in the United States. Potential respondents were identified by telephone and e-mail contacts. The first mailing was made in early spring 2000, and a follow-up mailing was done three to four weeks later. Sixty-nine surveys were returned for a 63 percent response rate.²⁸

Questions addressed how much time is spent in the copy editing course on traditional tasks, such as grammar, spelling, punctuation and style; text editing (other than grammar); headline writing; design and other.

Survey questions included 39 Likert-type scale items addressing a variety of proficiencies editing professors might expect students who had taken copy-editing courses to have developed. These questions were scaled 1 to 5 (1=very

unlikely to be proficient to 5=very likely to be proficient). Broadly speaking, the proficiencies cover text editing, headline and caption writing, teamwork and organizational abilities, technology and multimedia.

Another set of questions asked how important it is for graduates to have a more limited set of 16 editing skills. These were included to provide a basis for comparison with a national survey done in 1999 that asked the same questions of copy editors and copy editing supervisors.

The national survey used a modified random-sampling procedure for papers of more than 15,000 circulation. They were divided into four circulation categories, with each group accounting for 12 million to 14 million daily circulation. Papers were asked to return either two, three or four surveys, depending on circulation size.²⁹

An initial mailing was sent in early 1999. Follow-up phone calls or e-mails were made within the next four weeks to newspapers that had returned no surveys. A second mailing was made to contacts at those papers. Additional follow-up contacts were made to non-responding papers in the smallest circulation category, which was underrepresented in returns. The overall response rate was 174 returned surveys or 59 percent of the sample of 295. Of the 117 newspapers, 88 returned at least one survey, representing about 75 percent of the sample.³⁰

Results and Discussion

Time Spent on Traditional Skills

More than 60 percent of the time in the basic class is spent on text editing—on grammar, spelling and punctuation (29.3 percent) and on other editing skills (31.3 percent). Headline writing and design account for a total of about 30 percent in the basic class. In advanced editing classes, which are taught by fewer than half of the programs that returned surveys, more emphasis is placed on design (33.8 percent), the same on headline-writing (16.5 percent) and considerably less on text editing issues (about 37 percent total). Time spent on “other” skills is less than 15 percent in basic and advanced classes.

These percentages suggest that traditional skills remain the core of copy editing classes. They also indicate that not much time is available during editing classes for anything beyond the basics of text editing, headline-writing and design.

Table 1
Proficiencies of Editing Students at Graduation

1. Fact-checking
(whether by the Web, references or sources)
2. Computer competencies
(fitting headlines and using Quark and Photoshop)
3. Word editing
4. Display type
(Headline and caption writing)
5. Editing of packages and series
6. Web-production skills
7. Multimedia skills

Proficiencies

The 39 item responses to the question "How likely are typical editing students at your school to become proficient in the following at the time they graduate?" produced a complex picture. Grouping the proficiency items into broad sets of skills yields a somewhat clearer picture. (See Table 1) In general, text-editing skills and computer competencies (including knowledge of the widely used design program Quark) were ranked most important. Headline writing was about the middle, and new media skills were at the bottom.

Sprinkled throughout are organizational skills (meeting deadlines, thinking independently, planning coverage with others and coaching). Proficiencies that would appear to reflect media convergence (designing Web pages and knowledge of multimedia) generally rank at the very bottom, even lower than earlier production proficiencies such as character-counting headlines, which has not been done at most newspapers since the late 1970s, and cropping and scaling photos by hand, which is done rarely given the near ubiquity of digital imaging in U.S. daily newsrooms.³¹

The message here seems to be that students are graduating with traditional editing and headline-writing skills and knowledge of the typical computer applications used in newsrooms. To a lesser degree, they are graduating with organizational skills. And to a much lower degree, Web production and multimedia skills.

Skills on the Job

Another way to look at the issue of competencies is through factor analysis of skills copy editors need on the job. Sixteen skill items were factor-analyzed using principal components analysis and Varimax rotation to see whether ostensibly related skills vary together. In the analysis of the professors' responses, four factors emerged.

The first was a versatility factor, with high loadings on a range of technical competencies: Photoshop knowledge (.927), Quark pagination (.794) and graphics (.802) and on reporting ability (.927).

Factor 2 also reflects a variety of skills but centered more on critical thinking (.842), solid background knowledge: current events (.714) and general knowledge (.664) and time-management skills (.698).

Factor 3 appears to be an organizational factor, with high loadings for coaching (.805), teamwork (.800) and interpersonal skills (.594).

Factor 4 is a production factor, with high loadings on headline and caption writing (.761) and page design (.577). It also had a high negative loading for video skills.

In a similar analysis of professionals' responses to the same 16 items based on the earlier survey, four factors also emerged, though the makeup of the factors was somewhat different from those shown in the analysis of professors' responses. Factor 1 was similar to Factor 2 in the analysis of professors, loading highly on critical thinking, background knowledge and word editing skills. But

Table 2
Comparison of Means for Professors and Professionals
For Skills Copyeditors Need

Skill	Means		t	p
	Profs	Pros		
Word editing	6.8	6.6	-2.01	.046
Headlines, captions	6.2	6.4	1.50	.134
Time mgmt./deadline	6.2	6.3	0.35	.723
General knowledge	6.1	5.9	-1.63	.105
Current events	6.2	5.8	-1.74	.083
Critical thinking	6.4	5.8	-3.05	.002
Teamwork	5.6	5.8	1.26	.209
Page design	5.6	4.0	-6.39	.000
Quark, pagination	5.5	3.6	-6.98	.000
Internet	5.4	3.6	-7.27	.000
Interpersonal	5.3	5.1	-0.87	.384
Reporting	4.6	2.0	-11.76	.000
Photoshop	4.6	2.0	-11.75	.000
Graphics	4.5	2.2	-10.09	.000
Coaching	4.4	3.4	-3.95	.000
Video and/or audio	2.6	1.4	-7.05	.000

headline writing (.788) also loaded highly on Factor 1, which suggests that professionals think of headline writing as part of the same skill set as editing while professors may associate it more closely with design. Factor 2 was a technical versatility factor, similar to the professors' Factor 1, though not as broad-based as in the professors' survey. Page design and Quark pagination did not load highly on this factor, but reporting skill did (.856), as did video skill (.715). Factor 3 was similar to that in the first analysis, and Factor 4 was a design-production factor (page design (.886) and Quark (.879).

Table 2 compares means on the skill items between the professors and professionals. It shows considerable agreement between the academy and the profession on the type of skills copy editors spend most of their time using word editing, headline writing and deadline and organizational skills. Professors, however, rank coaching, reporting, page design, Quark pagination, Photoshop, graphics and Internet skills fairly or very important, too. Neither group reports that video/audio skills (perhaps the key skills in a media convergence environment) are very important.

The t-tests in Table 2 show that many of the differences are significant, though some of the differences are not very large. Charts put the differences more in perspective. Figure 1 shows the professors' responses and those of the professionals across all circulation categories. The lines are essentially similar in the categories that reflect traditional skills in word editing and headline writing, background knowledge and organizational skills. They diverge in page design,

Figure 1
Importance of Skills: Professors and Professionals

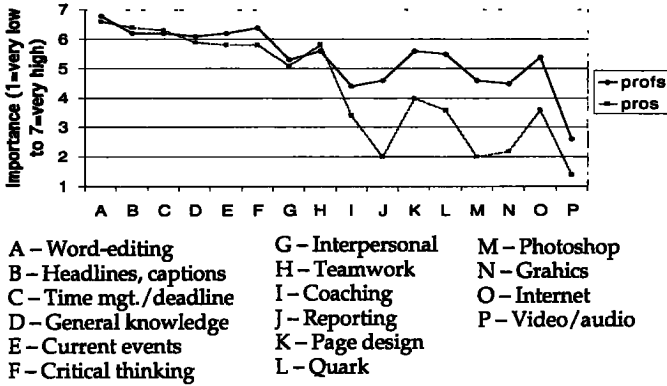
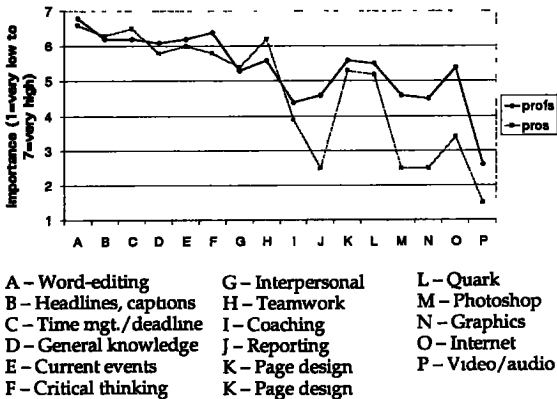


Figure 2
Importance of Skills: Professors and Professionals
<100,000 Circulation



graphics and reporting skills as well as in a variety of technology skills, such as knowledge of Photoshop and Quark. Figure 2 shows how the professors compared with professionals at smaller papers (those of less than 100,000 circulation). The differences between page design and Quark ability practically disappear, and the differences between professors and professionals on the

need for copy editors to have coaching and reporting skills decrease, too. The lines converge further when the analysis is limited to papers of less than 50,000 circulation.

Conclusion

Professors at ACEJMC-accredited programs appear to believe that traditional skills, reflecting text editing, headline writing and design, remain fundamental, which should come as little surprise. The need for those skills, particularly those involving word editing, is long established, and whatever form news presentation takes, those skills no doubt will remain crucial. Headline writing and design, too, are considered very important skills, though less time is spent in class on them.

The data on proficiencies students are likely to have and the skills they need for jobs also indicate that those traditional skills are important, but skills that have emerged in recent decades also have become essential. Those include technology competencies, such as ability to use Quark and the Web, and organizational abilities, such as interpersonal and teamwork skills. Looking at the range of possible proficiencies that can be taught and the time that is now devoted to traditional skills, one might conclude that anecdotal reports are correct—there aren't enough minutes in the class to do everything that professors think should be done.

Comparing professors and professionals on skills shows that there is considerable agreement on a number of traditional and technology skills and disagreement on the need for a number of others. The data show that, unlike professionals, professors seem to feel their students need it all—editing, reporting, technology, organizational and a variety of Web skills. The professors appear to reflect the view of professionals more closely at smaller papers, where copy editors often do need to have it all. Larger papers have larger staffs and can afford greater specialization in jobs. In effect, then, professors seem to be closer to professionals at papers that are more likely to hire students out of college. Perhaps instructors also are more likely to encourage flexibility in their students to better prepare them for the job market.

One interesting finding is where headline skills fit into the picture. To the professors, headline writing falls into a design factor; to professionals, it goes with story editing. The difference might in effect be a "Quark effect." In many classroom situations and at many small papers, copy editors do most of their work in Quark—design, headline writing and sometimes even text editing. At larger papers, copy editors tend to edit and write headlines on front-end systems, and designers spend their day designing pages on Quark or other systems.

This study suggests that professors and professionals are largely in agreement about how to prepare students for traditional print newsroom technology.

The data also suggest that neither group feels that preparation for a multimedia future is particularly crucial at this point, though professors appear to be more comfortable with one key convergence skill—video—than so their counterparts in print newsrooms. One is tempted to conclude that the professors are actually closer to the cutting edge. The data here are merely suggestive, though. A different picture might well emerge if professors were compared with professionals in online newspaper newsrooms.

It would seem to be good news that professors and professionals are largely on the same page. Whether it is the right page is a different issue, somewhat beyond the scope of this study, but the results suggest a few observations about the future. For example, the great importance both groups place on traditional skills of editing and presentation should serve students and the industry well no matter which direction it moves. Even converged media will need editors who have a love for language and the ability to improve writing and present stories in compelling ways.

The importance placed on technology skills needed for news production in the short term, while an understandable concern for professors and professionals, could prove to be shortsighted in the long term if it becomes a straitjacket. Copy editors who are facile with Quark, for example, are versatile in today's newspaper world. Whether such training will help them much if media change to different forms of delivery is an open question. Perhaps it will. An openness to learning one system is often the key to learning others. A greater problem may be the relative inattention currently paid to the conceptual tools needed to shift gears to new forms of news delivery. Knowing when to use which forms to tell which stories may be as valuable a skill tomorrow as knowing how to import a photo into a Quark page is today. One might say that students are in good shape as far as the past and present go in copy editing but that the future is somewhat cloudy.

Notes

1. The American Society of Newspaper Editors report on credibility states: "The public sees too many factual errors and spelling or grammar mistakes in newspapers." It continues, "Essentially, readers don't care whether the reporter was rushed, or that the staff was down three people, or if the copy editor was too busy laying out pages to catch misuses of the common language." The American Society of Newspaper Editors, "Examining Our Credibility," *The American Editor* (January 1999): 7

2. William G. Christ, et al., "Integrated Communication Programs," chapt. 39 in *Media Education Assessment Handbook*, ed. William G. Christ (Hillsdale, N.J.: Lawrence Erlbaum, 1997).

3. See, for example, William G. Christ, "Defining Media Education," chapt. 1 in *Media Education Assessment Handbook*, ed. William G. Christ; Robert O. Blanchard and William G. Christ, *Media Education and the Liberal Arts: A Blueprint for the New Professionalism* (Hillsdale, N.J.: Lawrence Erlbaum, 1993), Jeffrey McCall, "Student Occupational Concerns in a Liberal Arts Program," in *Leadership in Times of Change*, ed. William G. Christ (Mahway, N.J.: Lawrence Erlbaum, 1999), 279-293

4. See, for example, Betty Medsger, *Winds of Change: Challenges Confronting Journalism Education*. (Arlington, Va.: The Freedom Forum, 1996).

5. Tom Dickson and Wanda Brandon, "The Gap Between Educators and Professional Journalists." *Journalism and Mass Communication Educator* 55, no. 3 (autumn 2000) 50-67.

6. William G. Christ and Terry Hynes, "The Missions and Purposes of Journalism and Mass Communication Education," *Journalism and Mass Communication Educator* 52, no.2 (summer 1997): 74-90.

7. Christ and Hynes, "The Missions and Purposes," 84-85.

8. Christ and Hynes in "The Missions and Purposes" found that most programs (68.7 percent) mentioned that they prepare students for specific media industries.

9. Lana F. Rakow, "The Curriculum Is the Future," *Journal of Communication* 43, no 4 (autumn 1993): 154-162, 156

10. John Pavlik, "Transforming Journalism Education," in Roland De Wolk, *Introduction to Online Journalism*. (Boston: Allyn & Bacon, 2001), 40-44.

11. Steve Outing, "It's Not Your Father's Newsroom," *Editor & Publisher.com*, 20 December 2000, <<http://www.editorandpublisher.com/ephome/news/newshtm/stop/st122000.htm>> (March 2001)

12. John Pavlik, "Information Technology: Implications for the Future of Journalism and Mass Communication Education," Report of the Subcommittee on Educational Technology prepared for AEJMC Taskforce on Journalism and Mass Communication Educator at the Millennium, 2 October 2000, <<http://newmedia.Colorado.EDU/links/pages/24.html>> (3 March 2003).

13. By the end of 2000, video was not a staple of most web sites, because of bandwidth issues and problems of delivering video over phone lines. Streaming video was making inroads, but for the vast majority of web sites, video was an add-on, not fundamental to the message, as it is in television

14. Lewis A. Friedland and Sheila Webb, "Incorporating Online Publishing into the Curriculum," *Journalism and Mass Communication Educator* 51, no. 3 (autumn 1996). 54-65; Robert Huesca, "Reinventing Journalism Curricula for the Electronic Environment," *Journalism and Mass Communication Educator* 55, no.2 (summer 2000). 4-15.

15. Arthur Sulzberger Jr., speech to Editor & Publisher's 12th annual Interactive Newspapers Conference and Trade Show, Dallas, Tex, 22 February 2001. The text of his remarks was available at <<http://www.nytc.com/financial/man.prs.eandp.htm>>(February 2001).

16. See, for example, Christopher Harper, "Doing It All," *American Journalism Review* 18, no 10 (December 1996): 24-29.

17. See, for example, the package of articles in *The American Editor*, July 2000 on convergence at the *Milwaukee Journal Sentinel* and the *Tampa Tribune*. Stories available at *American Society of Newspaper Editors Archives*, 18 August 2000, <<http://www.asne.org/kiosk/editor/00.july/convergence1.htm>> (5 March 2003).

18. See, for example, Paul Farhi, "The Dotcom Brain Drain," *American Journalism Review* 22, no. 2 (March 2000): 30-33, and J.D. Lasica, "Attracting Young Talent to the Web," *American Journalism Review* 21, no 4 (May 1999): 84.

19. Ann Auman and Betsy B. Alderman, "How Editors and Educators See Skills Needed for Editing," *Newspaper Research Journal* 17, no 1/2 (winter/spring 1996): 2-13.

20. Ann Auman, "A Lesson for Instructors: Top 10 Copy-Editing Skills," *Journalism and Mass Communication Educator* 50, no 3 (autumn 1995): 12-22

21. John Russial, "Mixed Messages About Pagnation and Other Skills," *Newspaper Research Journal* 16, no. 1 (winter 1995): 60-70.

22. John Russial and Wayne Wanta, "Digital Imaging and the Hiring and Training of Photojournalists," *Journalism and Mass Communications Quarterly* 75, no 3 (autumn 1998): 593-604.

23. See, for example, Buck Ryan, "Editing Takes on a New Look," *Quill* 83, no. 2 (March 1993): 19-24; Kathleen A. Hansen, Mark Neuzil and Jean Ward, "Newsroom Topic Teams: Journalists Assessments of Effects on News Routines and Newspaper Quality," *Journalism and Mass*

Communications Quarterly 75, no. 4 (winter 1998): 803-821. John T. Russial, "Topic Team Performance: A Content Study," *Newspaper Research Journal* 18, no. 1/2 (winter/spring 1997):126-144.

24. Ann Auman, "Seeing the Big Picture: The Integrated Editor of the 1990s," *Newspaper Research Journal* 16, no. 1 (winter 1995): 35-47; David Craig, "Cross-Training, Rotation Leads to Less Stress," *The American Editor* (January 1998): 16-17.

25. Ann Auman, "Design Desks: Why Are More and More Newspapers Adopting Them?" *Newspaper Research Journal* 15, no. 2 (spring 1994): 128-144.

26. David Zeack, "Leadership vs. Management," *The American Editor* (September 1997): 4-7.

27. Auman, "A Lesson for Instructors," 21.

28. The schools that responded represented a wide range of enrollment - from 60 to 1,200 undergraduates.

29. One contact was chosen for each paper sampled and two, three or four surveys sent to that person, depending on size of paper. In most cases, the contact was a copyediting supervisor (a copy chief or a news editor) whose name was listed in the 1998 Editor & Publisher International yearbook or in the membership list of the American Copy Editors Society. As of 1999, ACES numbered about 1,000 members representing several hundred papers. The contact was asked to fill out one survey and pass the other or others on to copy editors or a supervisor who fit the following criteria: If a supervisor, he or she was asked to give the other survey to a copy editor without supervisory responsibilities. In larger papers, supervisors were asked to give copies to non-supervisors in different departments. The sample did not include papers of less than 15,000 circulation. Jobs held by copy editors at those papers are somewhat similar to those at larger papers, but they are dissimilar in important ways. Relatively small dailies, for example, typically lack the specialized job descriptions and level of editorial organization of larger papers. Auman and Alderman note that some editors of small papers failed to respond to a survey in 1995, writing that they were too small to have copy editor positions. Ann Auman and Betsy Alderman, "How Educators and Editors See Skills Needed for Editing," *Newspaper Research Journal* 17, no.2 (winter/spring 1996): 2-13. Because the number of news staff members, including copy editors, increases with circulation size, it was assumed that roughly the same number of copy editors would be working in each group. Within each category, papers were randomly selected according to the following schedule:

Circulation category	Papers sampled	Surveys/ paper
350,000 and up	18	4
150-350	25	3
50-150,000	38	2
15-50,000	36	2

The sample contained from 72 to 76 subjects in each of the four groups for a total of 295

30. Responses were somewhat skewed by circulation group. The number of responses ranged from a high of 59 surveys in the 150,000-350,000 group to a low of 24 from the 15,000-50,000 group, primarily on the lower end of the range, even with additional effort made to get those returns.

31. Russial and Wanta, "Digital Imaging and the Hiring and Training of Journalists."

