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UNDERGRADUATE CURRICULUM

The curriculum forms the nucleus of colleges and universities. As the vehicle for organizing, teaching, and learning, it provides the primary domain for academic decision making, expresses institutional purposes and values, and serves as the primary touchstone in the academic lives of students, faculty, and administrators. Because of its importance, the curriculum has historically served as an important arena for discussion and debate about the ends and means of learning in higher education.

Throughout the last decade, the content and character of the undergraduate curriculum has, once again, become the focus of vigorous debate. *The Closing of the American Mind* (Bloom, 1987) and *Cultural Literacy* (Hirsch, 1987) provided piercing and highly publicized critiques of American higher education. Several national reports—including those by the Association of American Colleges (AAC, 1985), the National Institute of Education (NIE, 1984), and the National Endowment for the Humanities (NEH) (Bennett, 1984)—were sharply critical of the condition of undergraduate education. These reports have been supplemented by the views of a range of other stakeholders in higher education who have expressed robust concern about the purposes, substance, and integrity of curricula in the nation's colleges and universities. Within institutions, concern has been voiced by governing boards, administrators, faculty, and students. Externally, interest has been expressed by the federal and state governments, private foundations, professional associations, accrediting agencies, and the public. There have been few periods in the history of American higher education when academic programs in colleges and universities have been scrutinized as closely or debated as vigorously and publicly.

Within the context of this growing concern, there has been an outpouring of studies, reports, and essays addressing the content and character of curriculum in higher education. The purpose of this article is to review the research and scholarship in four areas of inquiry: curriculum trends in general education, curriculum trends in fields of study, innovations in general education, and innovations in fields of study. For definitional purposes, the terms *curriculum* and *academic programs* are used interchangeably to refer to educational experiences designed to encourage purposeful student learning and development.

Trends in General Education

In the context of growing concern about the coherence, content, and structure of undergraduate education, hundreds of colleges and universities have reviewed their commitment to general education during the past decade. Most of these institutions have introduced changes and modifications aimed at strengthening their general education programs. Based on both qualitative and quantitative analyses, a review of the literature revealed various surface and underlying tendencies in general education. Five trends are mentioned here.

Increased Amount. An increase in the relative proportion of required general education is a dominant theme in the recent scholarship on general education. A Carnegie study (Blackburn, Armstrong, Conrad, Didham, & McKune, 1976), reported that the average percentage of general education course work in four-year colleges and universities declined significantly from 43% in 1967 to 33% in 1974. Recent studies indicate that this trend is gradually being reversed. In a survey of 139 institutions, Gaff (1983) found that approximately three fifths of these institutions had increased the proportion of required credit hours in general education to an average 44% by 1981. A Pennsylvania State University study of 456 colleges and universities in 1988 found that this percentage had dropped slightly to 40% (Locke,

1989) but remained well above the 33% required in 1974. In a recent survey by the American Council on Education, four of every five two- and four-year colleges and universities required their students to complete a specified amount of course work in general education to meet graduate requirements in 1989 (El-Khawas, 1989).

Tightening Requirements. Closely paralleling the increase in the amount of general education has been the trend toward tightening general education content requirements. Between 1970 and 1985, the Carnegie Foundation for the Advancement of Teaching (CFAT) (Boyer, 1987) found that general education requirements were modestly greater in the content areas of English, philosophy, Western civilization, Third World, and international education. There were substantial increases in mathematics, computer science, and the arts, but requirements were loosened in foreign language and physical education. In their recent study of 456 four-year institutions, a team of Pennsylvania State University researchers discovered that colleges and universities have tightened requirements in mathematics, speaking, and writing in the general education curriculum (Locke, 1989). In 1967, for example, only 33% of four-year institutions required at least 3 credits of mathematics in their general education program; in 1988, however, the researchers noted that 65% of the institutions responding prescribed this level as a minimum requirement. Similarly, in 1967, 90% of these institutions required at least 6 credits of speaking and writing course work in their general education curriculum. After a sharp decrease to 72% in 1972, nearly 86% of these institutions currently require these basic literacy courses in their general education program (Locke, 1989). Despite these increases, recent studies have expressed concern about the breadth and depth of the general education curriculum, particularly in the natural sciences, mathematics, and academic computing areas (Boyer, 1987; Zemsky, 1989). In its annual study of campus trends, the American Council of Education found that only 41% of two- and four-year colleges and universities required a course in computer science in their general education programs (El-Khawas, 1989). In addition, only 24% required a course in Western civilization. Notwithstanding the increase in the amount of general education, these studies question the adequacy of current requirements in specific general education content areas.

Structural Stability. Contrary to the conventional wisdom, there has not been a substantial remodeling of the structure of general education during the past decade. Although there has been public outcry for an interdisciplinary core curricular approach (Bennett, 1984; Bloom, 1987; Cheney, 1989), the traditional distribution structure continues to dominate general education programs.

Historically, general education programs have been structured according to three basic approaches. The most common is to circumscribe a limited number of courses to satisfy distribution requirements across targeted content areas, such as three courses in the natural sciences and two in the social sciences. In this approach, the tagging of specific courses is aimed at ensuring that general education courses are specifically designed in light of the overall aims of a liberal education—rather than driven by the demands of various disciplines. The major-dominated model is the second structural approach to general education. In this model, each academic department establishes its own general education requirements for its students. The third approach—the core curriculum—requires all students to participate in a common, usually interdisciplinary, learning experience. This approach is often focused on a unifying theme, such as the great books tradition at St. John's College.

In their recent survey of 284 four-year institutions, a team of UCLA researchers concurred with the findings of a 1978 Carnegie Policy Council study (Levine, 1978) that the distribution model was then, and is now, the preferred structure for general education programs. In 1978, 85% of surveyed colleges and universities structured their general education program according to the distribution model (Levine, 1978). A decade later, this proportion had increased to 93% (Locke, 1989).

Emphasis on Basic and Advanced Skills. A fourth trend focuses on the increased emphasis given to basic and advanced skills in the general education curriculum. During the past decade, attention has been directed to improving students' basic skills in reading, writing, computing, speaking, and listening, as well as the more advanced skills of "abstract logical thinking and critical analysis" (AAC, 1985, p. 15). This renewed attention to skills in the general education program appears to have been precipitated by studies indicating the academic unpreparedness of today's college students. As one study shows, colleges and universities have addressed this concern through remedial instruction. Of the 250 four-year institutions studied, 84% offered remedial basic skills courses by 1984. One of every seven freshmen enrolled in at least one remedial course in English or mathematics at these institutions (Roueche, Baker, & Roueche, 1985). Currently, nearly 65% of two- and four-year colleges and universities require mandatory assessment of basic college-level skills for their students (El-Khawas, 1989). Gaff (1988) aptly summarized the attention given to the teaching of basic and advanced skills in the general education curriculum, stating that "there is great agreement in and out of the academy that students need to express themselves more clearly and cogently, both in writing and orally; they should be competent in mathematics and other formal reasoning abilities; and they should be critical thinkers" (pp. 5–6).

Integration. This trend concerns the movement toward greater integration in the general education curriculum. During the past decade, much criticism has been targeted at the incoherence and disjointedness of gen-

eral education programs. In response, more than two thirds of the nation's colleges and universities have revised their general education programs to require some form of integrative experience (AAC, 1980). Among others, four existing curricular themes are reflected in this trend toward greater integration: a renewed emphasis on humanities, social sciences, and natural sciences instruction; freshman seminars; experiential learning; and values and ethics education.

During the past decade, a newfound emphasis has been placed on the integrative role of the humanities, social sciences, and natural sciences in the general education curriculum. The interdisciplinary liberal studies general education honors program at the University of Southern California provides an example. This optional two-year program is rooted in a mix of literature, history, and science core courses and classical texts that "raise the great ideas and questions traditionally considered in a liberal education: What is the nature of humanity, of the hero, of death, of our relationship with the divine" (Praxis, 1987, p. 36).

Implementation of freshman seminars also has become a popular method for increasing the coherence of general education programs (Conrad, 1978; Gaff, 1989). Although relatively common at liberal arts colleges, these seminars of 15 or fewer students have recently begun to appear on large university campuses. For example, the University of Wisconsin-Madison currently offers a range of elective freshmen seminars in the humanities, social sciences, and natural sciences that are taught by some of the university's most highly regarded emeritus professors. Past seminars have addressed literary humanism and the rise of the French Revolution, critical theory and social problems, and the causes of world hunger.

Experiential learning programs have been yet another approach to integrate liberal studies within the general education curriculum. At St. Olaf College, an experiential learning program permits undergraduates to grapple with, puzzle through, and solve real-world mathematics problems. Students have worked with the Minnesota Department of Public Health, creating a computer software program to trace the spread of the AIDS virus, and with the Honeywell Corporation, constructing a mathematical model designed to maintain the stability of space shuttles on reentry into the earth's atmosphere.

Values and ethics education has also reemerged as a unifying force within numerous general education programs (AAC, 1988; Boyer & Levine, 1981). Among others, Fordham University and Georgetown University have utilized education approaches to bring greater coherence and unity to their general education programs.

These integrative approaches are neither new nor unique to general education. The interdisciplinary core curriculum originated in the medieval university. The modern freshman seminar was originally developed by Harvard University professor David Riesman in 1959 and became increasingly popular in colleges and universities in the early 1970s (Gardner, 1986). Experiential learning appeared in the progressive colleges early in this century. Finally, the roots of values and ethics instruction in the American general education curriculum began with the Puritan and Anglican founders of Harvard College and the College of William and Mary in the seventeenth century; its modern expression surfaced in the values clarification movement of the 1960s.

During the past decade, however, these and other curricular approaches have merged in an attempt to add greater coherence and connectedness to general education programs (Gaff, 1988). The trend toward integration has sought to reunify general education from a "spare room that has no precise function" (Boyer & Levine, 1981, p. 3) to a purposeful collection of courses that collectively and coherently address the broad aims of a liberal education.

Trends in Fields of Study

While much of the visible and public concern about curriculum has focused on general education, colleges and universities have made sweeping changes in the depth—or concentration—component of their programs. Four important trends in fields of study are found in the literature.

Proliferation of Programs and Specializations. Despite growing concern in the public sector about program duplication, most colleges and universities have expanded their program offerings—both by adding new programs and, more frequently, by introducing new specializations within existing programs. According to the latest *College Blue Book* (1989), two- and four-year colleges and universities now offer more than 6,000 undergraduate majors. Newly added programs include such diverse majors as aeronautical technology, educational computing, and clinical pastoral care. Many colleges and universities also have introduced new specializations within fields, such as the expansion of degree programs in English to include subspecialties in business and technical writing.

Increasing Professionalization. A second trend concerns the professionalization of degree programs. In 1971, approximately one half of all undergraduate students majored in professional programs; 15 years later, almost two thirds did (National Center for Educational Statistics [NCES], 1989). Among the most popular majors in 1986, 24% of all students chose business and management, another 14% selected computer science and engineering, 9.5% selected the social sciences, and another 9% opted for education. These four majors accounted for approximately three fifths of all undergraduate degrees conferred in 1986 (NCES, 1989). This move toward professional education likewise has produced a sharp decline in student enrollment in the lib-

eral arts and sciences. Two decades ago one of every two undergraduate students majored in the arts and sciences; by 1986, this ratio had dropped to approximately one in three (NCES, 1989).

Integrating Liberal Studies with Professional Education. The increasing trend toward professionalism has prompted a corresponding initiative to reintegrate liberal studies into undergraduate professional programs. In recent years, several authors have written on the need for a liberally enriched professional learning experience (Bergquist, 1981; CFAT, 1977; Levine, 1978; Stark, Lowther, & Hagerty, 1986). In specific fields of study, such as engineering and business administration, numerous conferences have been held on the same topic (Guroff, 1981).

Boyer (1987) introduced the concept of an *enriched major* as a method for integrating liberal study into the professional undergraduate curriculum. As he explained, "When a major is enriched, it leads the student from depth to breadth and focuses not on mere training, but on liberal learning at its best" (pp. 114–115). Boyer's enriched major is representative of a more general trend to liberalize professional education during the past decade.

At Scripps College, for example, undergraduate business students can participate in a humanities internship program, in which off-campus business internships are integrated with on-campus humanities study. As part of a weekly seminar, students read both contemporary and traditional humanities works and use these works, plus their internship experience, to explore topics such as women and work, business ethics, and capitalism and socialism. At the University of Kansas, the School of Business developed a series of interdisciplinary courses that focus on the humanities and business. Courses include Moral Issues in Business, Literature and Management, and Cultural Interaction.

Increasingly Diverse Student Population. During the past 15 years, the blend of age, race, and ethnic backgrounds among college and university students has been richer than ever before in American higher education.

Since 1970, the number of adult (aged 25 and older) and female students in higher education has increased dramatically. During the 15-year period between 1970 and 1985, the number of adults attending college more than doubled (NCES, 1988). The number of women enrolled in baccalaureate programs increased from 42% to 53% (NCES, 1988). Of the more than 6 million adults currently pursuing college degrees across the country, 60% are women (College Age, 1989).

Racial and ethnic group representation in higher education also increased between 1970 and 1986. Approximately 18% of college and university students were members of a minority group in 1986, a small increase from 15.4% in 1976. With the notable exception of black students—where enrollments actually dropped from 9.4% in 1976 to 8.6% in 1986—minority student enrollments—primarily Hispanic and Asians—have increased during the past 15 years (NCES, 1988).

Innovations in General Education

For various reasons—from increasing student enrollments to the need to provide greater coherence in the undergraduate experience—a variety of attempts have been made to revitalize general education during the past 15 years. Two innovations of particular interest are the incorporation of new perspectives—such as global, gender, and multicultural studies—into the curriculum and the creation of faculty development programs designed to expand the scope and improve the quality of undergraduate teaching.

Emergence of New Perspectives. Since the early 1980s, the question of what knowledge is most worth knowing has become a topic of heated debate. The Association of American Colleges (1980) called for greater attention to cultural diversity in undergraduate general education: "The first curricular priority is to implant a strong international dimension into the core of general education requirements. The curriculum should be expanded to introduce students particularly to non-Western cultures" (p. 4). A hotly debated issue across scores of college campuses was the "blockbuster Western Civ" requirement as "the ubiquitous . . . general education course" for everyone. Many colleges and universities have slowly retired it, developing instead innovative general education programs that included a greater emphasis on global, gender, and multicultural issues (Warren, 1982).

Spurred on by an increasingly culturally diverse American population, the growing emphasis for new perspectives courses has been reflected in the changing curricular landscape of American colleges and universities. Emphasizing a variety of perspectives outside the traditional canon, many of these innovative courses draw attention to the role of minorities and women in American society. At the University of California, Berkeley, for example, where approximately one of every two students is a member of a minority group, students pressured faculty for a required general education course examining the role of minorities in American culture. Faculty at Stanford University recently replaced the university's yearlong Western civilization requirement with a new intercultural general education sequence in Cultures, Ideas, and Values. The new program is intended to give greater attention to race, gender, multicultural, and class perspectives; it includes texts from the existing traditional canon and numerous works by women and minority authors. At Western New England College, undergraduate students are required to complete one course in the college's Culture's Past and Present program as part of their general education sequence. The course encourages students to analyze two different cul-

tures from five perspectives; physical environment, historical context, aesthetic expression, social organization, and economic/political structure.

Similarly, gender studies have been included in undergraduate general education program. During the past 20 years, more than 500 programs and approximately 39,000 women's studies courses have been offered in American colleges and universities, either as electives or as part of the general education curriculum (AAC, 1988). Recent innovations include integration of gender and global studies within a single course, department, or program. At the California State Polytechnic University, for example, the Department of Ethnic and Women's Studies was the first joint global studies/women's studies program in the nation. Established in 1980, department faculty offer courses in Racism and Sexism and The Ethnic Women. At William Patterson College in New Jersey, 1,500 freshman students are required to complete the course Racism and Sexism in a Changing America as part of their general education program. Each of these programs, among others, is designed with the intention of integrating various multicultural, gender, and class perspectives into the general education curriculum. The emerging question of whose heritage, culture, and traditions should be addressed in general education, and the subsequent gender and global studies programs that have been developed to address this issue, have ushered in unique curricular innovations.

Faculty Development Initiatives. A variety of innovative programs have been initiated during the past decade to prepare, develop, and retool faculty to teach global, gender, and multicultural studies in the general education curriculum. Current efforts in faculty development include improving pedagogical techniques, developing cross-cultural and gender-sensitive teaching strategies, and constructing methods for integrating global and gender perspectives into general education courses (Gaff, 1989).

The Cross-Cultural Perspectives in the Curriculum Project at San Francisco State University is representative of the innovative faculty development programs that have emerged in many colleges and universities across the country during the past decade. With the expressed goal of integrating diverse multicultural perspectives into six traditional content areas (speech, English, humanities, sociology, psychology, and economics), members of the project team prepared a series of 5-hour departmental workshops designed to introduce faculty to cross-cultural perspectives. In addition, the workshops addressed practical teaching issues, including seminars on Teaching Strategies for the Cross-Cultural Classroom, Cultural Pluralism and Esthetic Values, and Teaching/Assigning/Grading in the Cross-Cultural Classroom. Programs at the University of Arizona, Wheaton College, and William Patterson College have likewise initiated innovative faculty development projects that concentrate on recruiting and preparing faculty to integrate global, gender, and multicultural perspectives within their general education programs (Gaff, 1989).

Innovations in Fields of Study

Broader societal changes have acted as a catalyst in producing numerous curricular innovations in fields of study during the past decade. Among these changes are the increasing demand for specialized knowledge across a wide range of fields and a persistent urgency to provide alternative modes of instruction for adult students. In particular, four curricular innovations have emerged at the undergraduate level.

New Specializations Within Fields of Study. Responding to the changing needs of the broader society, colleges and universities have introduced numerous innovative academic programs, often as subdivisions within existing fields of study. Professional fields, such as business administration and education, have created new intradisciplinary specializations since the early 1980s. Many business schools have introduced specialized degree tracks, such as international marketing and advertising management, within their Bachelor's of Business Administration (BBA) degree programs. In education, intradisciplinary specialization has included tracks in the teaching of English as a second language and educational technology at both the baccalaureate and master's degree levels. The development of each of these intradisciplinary specializations is closely linked to recent employer demands for highly specialized graduates (Conrad & Eagan, 1990; Hugstad, 1983).

Interdisciplinary Programs. Interdisciplinary programs have become a popular curricular innovation at the baccalaureate level during the past 15 years. In an increasingly interdisciplinary and complex world, these programs reflect a change in traditional conceptions about disciplinary boundaries. As Conrad and Eagan (1990) explain, interdisciplinary programs take two curricular forms: programs thematically "blended by design" and joint degree programs that integrate course work from two or more disciplinary fields.

Blended interdisciplinary programs are centered on a problem, theme, or issue designed to integrate the knowledge and perspectives of several traditional disciplines. These interdisciplinary programs have been developed as an innovative method of addressing a broad range of emerging curricular interests, including area studies, women's studies, environmental studies, and urban studies. At Duke University, for example, the undergraduate major in comparative area studies has become one of the university's more popular programs of study, quadrupling in size during the past decade. Through such courses as Introduction to Cultural Anthropology and Comparative Politics, students are exposed to both breadth and depth of study in their choice of nine different cross-cultural areas.

The second important approach to interdisciplinary

programs—the joint degree—combines course work from two or more disciplinary fields. Less thematically based than the blended interdisciplinary major, joint degree (or dual degree) programs have also become increasingly popular in higher education since 1980. According to the *College Blue Book* (1989), approximately 300 institutions currently offer undergraduate joint liberal arts/engineering degree programs and another 200 institutions offer joint liberal arts/health sciences programs.

Instructional Technology. Recent developments in video and computer technology have led to a variety of innovative instructional techniques in baccalaureate programs. Both in and outside the formal classroom, new developments in instructional technology have added a new dimension to the curriculum in colleges and universities.

Recent innovations include cable television, closed-circuit satellite transmissions, videotapes, interactive videodisks, microcomputers, computer simulations, and "intelligent computer-assisted instruction" (Knapper, 1988). Of these innovations, microcomputers have had the greatest impact on instruction and learning in colleges and universities. According to a recent EDUCOM survey, word processing accounted for almost 40% of all student computing in higher education (Knapper, 1988). Similarly, a wide range of microcomputer software packages—often described as computer-assisted instruction (CAI) programs—have been created. The vast majority of CAI programs are used for remediation purposes and often provide a series of drill and practice tutorials.

On a lesser scale, microcomputer simulations have been used as yet another innovative instructional tool. These simulations model real-world problems through the use of innovative computer software programs, allowing students to creatively solve problems within their own college environment. For example, as part of Hampshire College's Capital versus Community course, a computer simulation encourages business students to grapple with the problems of job loss and capital flight triggered by the closing and relocation of a large corporate plant in a medium-sized U.S. city. The widespread use of microcomputers as an instructional tool—particularly for word processing, CAI, and simulation tasks—has had a significant curricular impact in higher education during the past decade.

Electronic communication has played a vital role in the expansion of distance learning programs in higher education since the early 1980s. As a means of bringing undergraduate and graduate education to remote students, satellite transmissions, closed-circuit cable television programs, and videotapes have been developed as long-distance, off-campus instructional devices. In many fields students have the option of completing courses that are broadcast on public television. At the University of Wisconsin, Madison, for example, social work and engineering students from across the state can program their video cassette recorders to tape courses offered in the early morning hours on Wisconsin Public Television.

External Degrees. Another innovation that has attracted considerable attention recently is the proliferation of external degree programs. These programs are generally identified by nontraditional patterns of residential study in which students attend classes during the evenings, on weekends, or by other nontraditional means. The most common programs include the extended degree and weekend college.

Catalyzed by the burgeoning adult student population in colleges and universities, external degree programs have become increasingly popular. In 1989, approximately 75 extended degree and 375 weekend college programs were available at two- and four-year and graduate colleges and universities across the country (College Entrance Examination Board, 1989). A creation of the 1960s, innovative programs have revitalized the weekend college concept in the 1980s. For example, at John F. Kennedy University, a nontraditional institution for adults, all freshman and sophomore classes are incorporated into a weekend college format. Based on a calendar of 11-week quarters, students take four intensive courses per quarter. At Iowa Lakes Community College, students pursue associate degrees in the liberal arts, business administration, and health sciences through a weekend college held at a nearby shopping center. The program's approximately 150 students travel from as far as 150 miles away to take advantage of this nontraditional degree opportunity. External degree programs at the undergraduate level have been developed in a number of fields of study, including nursing, social work, and liberal studies.

Conclusion

The ferment in higher education over curricular questions has been accompanied by a substantial amount of scholarship and research. Overall, this body of work establishes that considerable change and innovation have occurred in the structure and content of academic programs. Through various points of view, numerous scholars have provided illuminating perspectives on the curricular debate in higher education.

It is important to conclude by noting an important development in the scholarship on curriculum: A growing number of scholars are studying the relationship between student learning and the curriculum. Although not yet conclusive, the emerging results are significant. For example, Pascarella and Terenzini (in press) have identified three intervening curricular factors that appear to enhance student learning outcomes: close student–faculty interaction, individualized and peer-teaching pedagogical approaches, and integrated core curricular structures. Considerable evidence has demonstrated the impact of audio-tutorial and other computer-based instructional methods on enhancing student

knowledge acquisition. Not surprisingly, other studies point to various links between effective teaching and student learning.

Despite these new contributions, little has been written on the impact of nontraditional curricular approaches and educational outcomes. Nor have scholars begun to address effectively the impact of curriculum on nontraditional student populations, including minority, part-time, and adult students. For example, in what ways do experiential learning opportunities and evening and weekend degree programs influence student learning? How do different student populations respond to alternative curricular approaches? Scholars must continue to study such relationships and develop a body of knowledge that will provide those involved in curricular development with a more robust foundation for making informed decisions. Further inquiry into relationships between academic programs and student learning could dramatically enrich the dialogue about curriculum in higher education.

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See also Business and Management Education at the Postsecondary Level; College Student Learning and Development; Demographic Changes in Education; Engineering Education; Graduate Education; Nontraditional Higher Education; Nursing Education; Professions Education.

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UNIONS

Teacher unions are key to understanding both the politics of public education and the practice of schooling. Since the advent of teacher collective bargaining 30 years ago, union membership has grown significantly. By early in the 1980s, 88% of the nation's teachers belonged to either the American Federation of Teachers (AFT) or the National Education Association (NEA), and over 60% were covered by collective bargaining agreements. This growth contrasts with the dwindling 21% of all private sector employees who belong to a labor organization (Finch & Nagel, 1984).

In addition to their sheer size, teacher unions are distinguished by three major characteristics. First, the AFT and the larger NEA are federated organizations that compete with each other for members and influence at the national, state, and local levels. Reflecting its labor union origins, the AFT historically concentrated its efforts on improving teachers' wages and working conditions and served a primarily urban membership. Throughout much of its history, the NEA was a professional organization that included both teachers and administrators and that emphasized raising the status of teaching as a profession over improving teachers' material welfare. As a result of competition from the AFT and the demands of its own teacher membership, the NEA underwent a radical change late in the 1960s, transforming itself in purpose and strategy into a union. Despite their current similarities in goals and tactics, the two unions differ on several key issues revolving around governance of the teaching profession and affiliation with the AFL-CIO. Yet neither organization is monolithic, and state and local affiliates have considerable autonomy in their positions and strategies. Second, teacher unions play two distinct, but related, roles. They act as voluntary organizations attempting to attract and retain members by meeting their demands for benefits and services. At the same time, they are political interest groups that must seek from government those benefits members desire. The challenge for teacher unions has been to obtain sufficient benefits to maintain their membership, while still operating effectively in a world of political bargaining and compromise (McDonnell & Pascal, 1988). Finally, teacher unions have pursued their dual roles of voluntary organization and political interest group using the twin strategies of collective bargaining and political action.

Unions in education are not confined to the elementary and secondary levels; over 30% of all faculty in colleges and universities are unionized or represented by collective bargaining agreements. Currently, more than 1,000 two- and four-year campuses in the United States formally recognize and bargain collectively with faculty (Douglas, 1990). These are overwhelmingly public institutions and do not include the nation's major research universities. Like elementary and secondary teacher unions, those in higher education have continued to grow, but at a much slower rate of 1% to 2% a year over the past decade. One reason stems from the dampening effect of the 1980 Supreme Court decision that ruled that faculty members at Yeshiva University were managers under the terms of the National Labor Relations Act (NLRA) and therefore not covered by the NLRA in the conduct of union activities. Research on faculty unions has found that they have contributed to a centralization of campus decision making; provided due process in personnel decisions; and contributed to a modest, but not insignificant, increase in average compensation (Garbarino, 1986). However, unions in higher education have never had a major impact on education policy and practice in the way that their elementary and secondary counterparts have. Consequently, this article focuses on teacher unions.

Research on Teacher Unions

Numerous historical studies have chronicled the turn-of-the-century origins of today's teacher unions and the unprecedented growth of teacher militancy beginning in the 1960s. Although political activism was often sporadic and localized in the early twentieth century (Tyack, 1974), teachers did coalesce around specific grievances related to their material well-being, such as unequal or inadequate pay. In contrast with the reform groups that emerged to address problems of school governance and instructional quality, organized teachers largely concentrated on securing personal benefits and improved working conditions for themselves (Urban, 1982).

As it became clear that teacher organizations had been transformed into labor unions and collective bargaining was becoming a fact of life in most school districts, research concentrated on identifying the determinants of teacher militancy and on describing the collective bargaining process. Studies in the 1960s and 1970s found that support for teacher organizations and for militant actions such as strikes was greater among younger, male, and secondary school teachers than among older, female, and elementary school teachers (Alutto & Belasco, 1976; Fox & Wince, 1976). Organizational correlates of teacher militancy included faculty