

DOCUMENT RESUME

ED 387 896

EA 027 090

AUTHOR Mancino, Julia Speares
 TITLE Curriculum Policymaking and the Global Economy: The Road Not Taken.
 PUB DATE Apr 95
 NOTE 22p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, April 18-22, 1995).
 PUB TYPE Speeches/Conference Papers (150) -- Viewpoints (Opinion/Position Papers, Essays, etc.) (120)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Educational History; *Educational Philosophy; Educational Policy; Educational Trends; Elementary Secondary Education; *Foundations of Education; Futures (of Society); *Policy Formation; Social Stratification; State Action
 IDENTIFIERS *South Carolina

ABSTRACT

This historical case study examines reasons for the domination of the traditional curriculum in South Carolina education since the turn of the century, although theorists and other scholars have advocated using integrated approaches to meet the changing needs of society. Data were obtained from interviews conducted with 34 state politicians, educational politicians, and representatives of special interest groups; and from analysis of state documents. In the early 1980s South Carolina educational reform centered on a "back to basics" approach that upheld the status quo, with no understanding of the impact of the global, high-technology economy on education. It is argued that the changing economy needs "symbolic analysts," whose educational needs are best met by a inquiry-based approach. Although state policymakers increased the requirements for science and mathematics, the meaning of "science" in a high-technology economy was absent from educational standards. The paper argues that the industrial orientation of the educational reform was an irrelevant, fragmented approach that fostered social stratification and increased the gap between curriculum and the community. It is argued that an integrated, inquiry-based curriculum design is essential to meet the new economic needs of the United States. (Contains 27 references.) (LMI)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED 387 896

CURRICULUM POLICYMAKING FOR THE GLOBAL
ECONOMY: The Road Not Taken

Julia Speares Mancino
Erskine College
Due West, South Carolina 29639

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

J. Mancino

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

A Paper Presented at the Annual Meeting of the American Educational
Research Association, San Francisco, California, April 1995.

BEST COPY AVAILABLE

EA 027090

CURRICULUM FOR THE GLOBAL ECONOMY: THE ROAD NOT TAKEN

Curriculum reform has emerged as the central focus of the school restructuring movement of the 1990s. As transformations in the nature of work and the workplace continue to proliferate, so do concerns that workers are not prepared for the changes. Needed to prepare students for success in a highly competitive global market is an integrated, inquiry-focused curriculum. Yet, the factory orientation embedded in traditionalism continues to perpetuate practice that, historically, has failed to keep pace with the momentum of business, industry, and community life.

Purpose and Procedure

The historical case study framing this report aimed to inform the question as to why the traditional curriculum has dominated practice since the early part of the 20th century although theorists and other scholars have advocated integrated approaches as more appropriate for meeting changing needs of students and the society. The broad context for the study was the education reform movement of the early 1980s. The representative case for indepth study was South Carolina, a state in which "education for economic growth" and "no more of the same" were planks in Governor Richard Riley's platform for moving the state into the technological and information age. When the euphemisms and elocutions had subsided, the traditional paradigm, tantamount to the fading industrial world's embodiment of quantification, production, and control,

emerged with strength indicative of separation and fragmentation that had plagued education throughout the century.

Primary data sources for the study included 34 personal interviews with persons holding positions comprising Spring's (1988) political system in education. Included were state politicians (governor's education staff, legislators, state board of education); educational politicians (state superintendent of education and other state personnel concerned with curriculum); and, special interest groups (representatives of the corporate sector who impacted policymaking for South Carolina's education reform act and representatives of the state's two [non-unionized] teacher organizations). A telephone interview with Terrel Bell, U. S. Secretary for Education during the early 1980s, provided insights on the national perspective. Primary documents included the governor's personal papers and other applicable collections housed in state archives (South Carolina Department of History and Archives; South Caroliniana Library) as well as State Department of Education documents and publications.

The Context

As the 1980s dawned, much was being said about an emerging world of new values, technologies, geopolitical relationships, lifestyles, and modes of communication. Old ways would not suffice; wholly new ideas and analogies, classifications and concepts would be required (Toffler, 1980). In striking contrast, the political philosophy embraced a new conservatism

calling for return to an older American vision (Evans & Novak, 1981).

Not until the nation grappled with a severe recession in the early 1980s did the realities of a dramatically different economy and profound pressures changing the nature of work and the work force come to the forefront. New jobs in service and high-tech industries required skills that many workers did not possess (Anderson, 1982). Threatened with loss of competitive edge in the international marketplace, the nation was at risk-- not because of documented failure of business and industry to keep pace with change but because of perceived failure of education.

Suffering from cyclical economic disturbances exacerbated by structural problems, South Carolina was especially hard hit during the recession. Typical of state reactions, Riley planked his platform with a massive effort toward "education for economic growth." A blue-ribbon task force with a majority membership representing business and industry and a minority of educators (which included no curriculum specialists) was appointed to take whatever course of action necessary to formulate policy for a "new approach to quality education" for the new economy.

Lack of Reflective Action

Inertia in Social Practice

With conservative think tanks formulating an agenda for a conservative administration and New Right fundamentalists attracted by a promise for restoration of traditional Christian

values, the extant school curriculum was attacked as a vehicle for promotion of secular humanism and rejection of established truths as presented by selected authorities. Targets were any curricular practice for promoting thinking, exploring ideas independently, or expressing feelings or emotions (Brodinsky, 1982; Park, 1980). Denounced by mandates developed by the Heritage Foundation for a conservative administration were multi-media interdisciplinary curricula and other humanistic or psycho-social programs that rely upon inquiry and discovery approaches and open-ended discussion without definitive answers to questions (Heatherly, 1981).

But curricula of this nature were neither practiced pervasively nor advocated at the time. Although appropriate for needs of a changing world, consideration of such alternatives never entered the debate for school improvement.

With a long history of conservative politics, South Carolina had no difficulty embracing conservative thought enveloping the nation in the early 1980s. Moreover, education policymaking throughout the century had remained within the zone of tolerance. Since the 1970s, South Carolina as well as other states had been entrenched in the "back to basics" movement--skill-oriented curriculum, standardized testing, and high-stakes accountability for test results. It was from this posture that the 1980s reform movement was extended. In no sense was it a departure from inquiry approaches, as suggested by the Heritage Foundation and other critics. "It was just a question of whether we have enough courses, enough time, enough

time on task, rather than new approaches to traditional curricula," a state legislator offered.

Standing for the Status Quo

Observations of earlier curriculum scholars who saw the need for a curriculum that would keep pace with changes brought on by the burgeoning industrial economy in the early 20th century fit in well with the reform scene in the early 1980s. According to Rugg (1927, p. 4): "The masters of the public school as a great conserving agency and the halo of the past have oriented those who have made the content of our school curriculum."

Notions that the existing curriculum was the problem or that there could be other ways were never brought to the table. To have assumed a different direction would not have been in vogue with the "thinking of the time," several policymakers concurred.

Political processes as the route to change in education are not a problem as long as they can be informed. But, as the foregoing comments attest, tradition is often an obstacle. The "we know what to do and how to do it" position (as a task-force chairman submitted) was a prime example. What they knew best was the halo of the past--the traditional curriculum. Without subjecting decisions to critical reflection and considering alternatives, policymakers rocked with the tide pulling to the right. Defending the course, a State Department of Education official said that "integrated curriculum would have been too complex to try to implement at a time when you were trying to

move off the bottom and deal with serious, long-term problems. I don't think we could have initiated the massive reform effort and a massive curriculum effort in the same step."

Given the society in which the students of the 1980s would work, the examination of an inquiry-based approach would have been far more effective use of limited time. Without reflective action, there was little ground for defending maintenance of the status quo curriculum.

New Economy, Old Ideas

Despite evidence that South Carolina had been in the midst of a postindustrial economy since 1970 and that the manufacturing economy had ended in 1980 (Baker, 1988), those engaged in education reform for the new economy had "no understanding that the world of work was changing so rapidly and that the things workers do were going to become dramatically different," a task-force subcommittee chairman reflected. Missing from the agenda was inquiry anent the nature of the emerging workplace and the kinds of skills workers would need for success in it.

As perceived panaceas for national crises in the past, science and mathematics made their way to the top of the political agenda. Rationalizing that the current generation of students would need to be better prepared for high-technology job opportunities, South Carolina policymakers submitted in the final report to the governor proposals for increased graduation requirements in science and mathematics. Absent from the

report was the meaning of "science" in a high-technology economy.

As Dewey had pointed out in 1916, science is "the perfected outcome of learning" and "consists of the method of inquiry and testing" (p. 221). Organization of science along subject lines actually promotes scientific illiteracy, while requiring students to take more of what they already dislike is unlikely to improve their scientific literacy (Hurd, 1984).

The same could be said for mathematics. The basic skills movement of the 1970s had produced youngsters who were only slightly better at skills of questionable value in the 19th century and of significantly less value in the 21st century (Willoughby, 1983). Void of emphasis on the real value of these disciplines, mandates for more disparate courses were barren, narrow conceptions that serve neither individual nor national purposes. For Dewey (1916), such schemes were merely justifications for the curriculum with which one is familiar; moreover, they imply educational disintegration. For Apple (1982), they are tenets of corporate belief that progress depends upon them.

In the curriculum Reich (1991) elaborated for a globally competitive economy, scientific inquiry is the organizing element of the curriculum. Because facts, rules, formulae, and the like are easily accessible with the flick of a computer key, mastery of old domains of knowledge is neither enough nor necessary. Replete with unidentified problems, unknown solutions, and untried means of integrating them, the new

economic order requires abilities to use knowledge effectively and think critically.

In the policy arena in South Carolina during the early 1980s, thinking emerged as an issue in the latter part of the debate. In the absence of curricularists, there was no expertise to inform the discussion. As the topic of higher-order thinking skills surfaced, one government actor indicated that "HOTS got in the last minute around the table with selected legislators. We couldn't explain what higher-order thinking skills were."

A legislator remembered, "Nobody knew what it [sic] meant, but it [sic] was thought to be a very good thing." Alluding to the notion that former cotton mill employees would have to be trained as technical specialists, he said, "We knew the way to do it was to teach them higher-order thinking skills. But we were a little vague on what was a higher-order thinking skill."

Further quandary was evident. "I think there was confusion and not a lot of clarity as to how the higher-order thinking skills ought to be taught--separate course or permeation of all aspects of ongoing curriculum," a government actor recalled.

Dewey's (1916) work alone could have provided a way out of the confusion while simultaneously furnishing a blueprint for curriculum policy for a global economy. "Thinking is a process of inquiry, of looking into things, of investigating" (p. 173), but it cannot be cultivated in isolation. Developing the ability of students to think, Dewey said, is all the school needs to do for students. Thinking in this light,

unfortunately, was not a part of what the policymakers knew how to do.

Further, to assume that thinking can be legislated is an error resulting from uninformed decision making. A mandate for emphasis on "higher order problem solving skills in curricula at all levels," nevertheless, made its way into South Carolina's reform act (Education Improvement Act, 1984, II-A-I-4).

But thinking was not for all students. "The feeling was students have to have basic skills before they can get into these areas," an education assistant to the governor explained. With "no understanding that basic skills and thinking skills go hand-in-hand and are not mutually exclusive, the assumption was that higher-order thinking should be delayed until high school and, even then, restricted to students in advanced placement courses and programs for the academically gifted."

The so-called "thinking of the time" was not in consonance with the sea of change in the world economy. The blue-ribbon commission's reform product, *The New Approach to Quality Education*, with its technocratic language legitimating the influence of business and industry in the reform process, simply mirrored corporate America's vanishing system of mass production.

Reflecting on the course of action, an influential representative of the business community confessed, "We organized our educational process like we organized our factories, turning out pretty good assembly line workers for an

economy where the old assembly-type jobs were being done by robots and not by people." Political expediency had disallowed identification, inspection, and weighing of different courses of action that would serve the economic interests of the state as well as providing personal meaning for students and their futures.

The Global Economy: Policy Implications

As commissions and task forces throughout the nation immersed themselves in developing educational strategies to meet emerging needs of an economy in transition, economists were challenging assumptions that American production would be revitalized. According to political economist Robert Reich (1991), competitiveness was coming to depend not on what any one American corporation or industry might do but on the functions American workers perform and the consequent value they add to the economy.

Differentiating the nature of work in the old and new economies, Reich posited that the strength of the high-value enterprise rests on the power of ideas as opposed to high-volume, low-cost production of standard commodities. Assets for a nation's competitiveness are not products but human skills.

Reich identified three divisions of human service, not altogether new to the workplace but seen through significantly different lenses: routine production (repetitive) services, in-person services, and symbolic analysis. Demand for routine producers in the United States is rapidly sinking because of

competition with millions of routine service workers in other nations in the global market. Although person-to-person services are sheltered from worldwide competition, in-person service workers must compete with labor-saving machinery and new groups constantly entering the labor force.

The most valued work in the world economy is symbolic analysis: identifying problems, solving problems, and strategic brokering. Because of the global market's demand for symbolic and analytic insights and skills, these services are not only highly competitive but also the most financially rewarding. Approximately 20% of the American workforce are symbolic analysts.

Integrating the American workforce into the new world economy, Reich pointed out, will depend heavily on education, but not the "standard assembly-line curriculum divided neatly into subjects taught in predictable units of time, arranged sequentially by grade, and controlled by standardized tests intended to weed out defective units and return them for reworking" (p. 226).

Further, denying any student the opportunity to become a symbolic analyst could not be justified. The school's duty continues to be seeing "to it that each individual gets an opportunity . . . to come into living with a broader environment," as Dewey (1916, p. 24) contended.

Preeminent is the curriculum design appropriate for preparing all students for the new order. Prerequisite basic skills include abstraction (manipulating, integrating, and

assimilating masses of disorganized information); systems thinking (seeing the whole and understanding how parts of reality are connected); experimentation (continuous engagement in working with highly unpredictable and frequently changing symbolic systems); and, collaboration (working with and through large numbers of people).

Although symbolic analysis has taken on a distinct meaning as it relates to the technological/information economy, the curricular approach Reich deemed essential for preparing students to be symbolic analysts is the same scientific inquiry approach that curriculum theorists and other scholars have advocated and justified for a century. Dewey (1938), for example, explained that thinking occurs only when a problem is presented. To think, he noted, means "to bind together facts or deeds otherwise isolated" (Dewey, 1910, p. 80). Creativity, the production of new ideas, is the product of inquiry.

As policymakers argued that notions such as these were not the "thinking of the time," so might they have said, and correctly so, that Reich's work was not available in the early 1980s. However, state economists were having much to say about the changing workplace and compatible education in the early 1980s. For a number of years, contemporary social scientists had been writing about what Goodlad (1984) concluded schools needed more than improvement in basics--"a fresh examination of their role in a society undergoing rapid change" (p. 15).

Political scientist Harold Laswell (1975) addressed the nature of global interdependence and the need for focus on the

world's critical problems and direct practice in problem-solving strategies. Sociologist Daniel Bell (1975) discussed the disappearance of old archetypes (e.g., assembly-line workers) and the high premium on education in the new professional and human services economy. Conceptual inquiry, according to Bell, was the the central implication for education.

Internationally celebrated economist Kenneth Boulding (1975) emphasized tolerance for ambiguity in social policymaking, criticizing the "more of the same" mentality in educational trends. During the depths of the recession in the early 1980s, management consultants Peters and Waterman (1982) found that excellent companies attended to human factors, while poor ones relied too much on quantitative analysis.

If heard at all, the messages had little effect on policy guiding education reform in the early 1980s. In addition to an irrelevant, fragmented approach, the industrial orientation perpetuated a view of human nature consistent with it.

An Insensitive View of Human Nature

Social Stratification

From the early stages of the educational reform process, policymakers embraced the sorting machine approach. According to a member of South Carolina's task force, "You have got to have something in there that impacts every sector positively--those at the bottom, middle, and top." Using output data, the compilation was broken down into subpopulations according to different needs. For the most part, "needs" were synonymous

with performance on standardized tests. To justify funding, a special curriculum was required for each "need," further splintering an already segmented curriculum.

Ways in which knowledge was distributed and through which students in the various tracks would come to view themselves were predictable. The small percentage at the top of the pyramid were entitled to knowledge associated with prestige; the masses (primarily low socio-economic) would receive basic knowledge structured to exclude skills beyond the application level of Bloom's taxonomy (according to state criteria for basic skills objectives). For many students, the die was cast during the first few days of formal first grade experience. For others, attested a teacher, parents "fought" and called principals to get their children in gifted programs.

Whether or not policymakers understood consequences of their actions, students understood their worth in the system. Differentiated curricula for varying intellectual abilities may lead to self-fulfilling prophecies and encapsulate options in life. The result is a kind of social stratification that makes it increasingly difficult for people to communicate with each other (Eisner, 1985). Moreover, it is not the result of a neutral process but a political enterprise with vested interest in maintaining the privileged position of the dominant economic class (Apple, 1982). Missing was a curriculum organization that enabled production of something of value to students as members of a community of learners (Greene, 1982).

Curriculum and Community

Without critical reflection of the problem underlying the need for educational improvement, the "piecemeal, half-a-loaf approach" to have been avoided (Riley, 1984) was exactly that which prevailed. Created were unnatural boundaries not only in subject matter but also among the various groups within the school community.

"There is something deep within human nature itself which pulls toward settled relationships," Dewey wrote in 1927 (p. 213). His thought has remained cogent as a global society dependent upon layers of interdependency and circles of ambiguity swell. Ignatieff (cited in Reich, 1991, p. 310) noted that it is natural for people to think in terms of communities, for "it is this dense web of relations and the meanings which they give to life which satisfies the needs which really matter to us."

When the nation was in the midst of grappling with uncertainties accompanying the transition from agrarian to industrial economy, Dewey (1927) referred to a public in eclipse, segmented into many publics without awareness of commonalities. Much like the early 1980s, the "thinking of the time" was not in concert with the emerging socio-economic order. To understand the problem, Dewey contended, the society must become a Great Community, "a life of free and enriching communion" (p. 184).

Parallels between events, thinking, and actions of our present society and that of Dewey's world are profound. As the

technological revolution penetrates the global economy and it is no longer possible to think in terms of traditional, national economies, the principles of social responsibility, shared meanings, and systematic, continuous inquiry that Dewey endorsed take on renewed meaning. Of critical import is the growing trend toward a two-class society and the impact the school curriculum has in either perpetuating or reversing the direction.

As gaps in income level between symbolic analysts and the remaining four-fifths of the workforce widen, so does dissonance between the world of the elite and that of the masses. The potential for an economically segregated society looms large, as the community of symbolic analysts perceives lack of commonality and continues withdrawal into homogeneous enclaves.

What, then, is the destiny of a society in which people no longer share economic values? The response may lie in how deeply people feel about sharing their humanity. Senses of justice and generosity are learned as are senses of injustice and inequity. It is the latter that are reproduced when the curriculum fosters social divisiveness and limits learning opportunities for particular classes of students.

A Representative Case

Policymakers in South Carolina conceded that reform actions were in concert with those of other states. Not wanting "to find themselves in left field when everybody else is marching in a different direction," as one government actor

explained, "we tried to gravitate toward those things commonly held."

Comprehensive studies and comparative profiles of the education reform movement of the early 1980s have indicated commonalities in reform measures. Although proclamations and promises for change abounded, the traditional curriculum model with its long record of inefficacy prevailed. The "most sustained drive for school renewal in the history of the nation" (Carnegie Foundation for the Advancement of Teaching, 1988, p. 1) had simply added another chapter to the history of educational bandwagons. Not only did consequences of policy and practice sustain an antiquated curriculum. They also posed a self-defeating approach for both state and nation.

Need for Integrated Inquiry-Centered Curriculum

Toward the end of the decade, it was becoming evident that the reform moves of the early 1980s had failed. A new wave aimed at preparing students for the 21st century ushered in national goals, national curriculum standards, national testing, state frameworks. Accompanying rhetoric appears compelling: connections among subjects, real life experiences, conceptual understandings, authentic assessments (National Council on Education Standards and Testing, 1992). The reality, however, is that all are being developed along subject lines. In view of a global economy that presents problems that cannot be solved within the confines of separate subjects, the response is simply *deja vu*.

Even if the traditional separate-subject paradigm had demonstrated utility in the past, it is totally out of synchronization with a dynamic, globally interdependent society and economy. To meet the demands of the larger society, students must experience a curriculum that fosters skills congruent with needs of today's world. Scientific inquiry as the focus of the curriculum, the method of instruction, and the means of evaluation never becomes outdated.

In addition to its value for the education of the nation's youth, it is the education of *all* policymakers--including those making economic decisions as well as those deciding the direction of the curriculum. To exclude economists from policy tables affecting the nation's economy would be unthinkable. Yet, it is equally untenable for those deciding educational alternatives appropriate for a highly competitive global economy to dismiss the need for curriculum expertise at the policy table.

To meet the needs and demands of our nation, an integrated, inquiry curriculum design is essential. During critical periods in the past, it has been said that curriculum was at the crossroads. Wisdom, justice, and compassion tell us that we have reached that point again. And, as the poet reminds us, it is the road less traveled that can make all the difference.

References

- Anderson, H. (1982, October). Putting America back to work. Newsweek, pp. 78-82.
- Apple, M. (1982). Education and power. Boston: Routledge & Kegan Paul.
- Baker, C. A. (1988, January 31). Education can prevent "McDonald's economy." The [SC] State, pp. 1-G, 7-G.
- Bell, D. (1975). Schools in a communal society. In L. Rubin (Ed.), The future of education: Perspectives on tomorrow's schooling, (pp. 31-48). Boston: Allyn & Bacon.
- Boulding, K. E. (1975). Predictive reliability and the future: The need for uncertainty. In L. Rubin (Ed.), The future of education: Perspectives on tomorrow's schooling, (pp. 57-74). Boston: Allyn & Bacon.
- Brodinsky, B. (1982). The new right: The movement and its impact. Phi Delta Kappan, 64(1), 67-94.
- Carnegie Foundation for the Advancement of Teaching. (1988). Report card on school reform. The teachers speak. Princeton, NJ: Author.
- Dewey, J. (1910). How we think. Boston: D. C. Heath.
- Dewey, J. (1916). Democracy and education. New York: Macmillan.
- Dewey, J. (1927). The public and its problems. New York: Henry Holt.
- Dewey, J. (1938). Experience and education. New York: Macmillan.
- Eisner, E. W. (1985). The educational imagination: On the design and evaluation of school programs (2nd ed.). New York: Macmillan.
- Evans, R., & Novak, R. (1981). The Reagan revolution. New York: E.P. Dutton.
- Goodlad, J. I. (1984). A place called school: Prospects for the future. New York: State University Press.
- Greene, M. (1982). Public education and the public space. Educational Researcher, 11(6), 4-9.

- Heatherly, C. L. (Ed.). (1981). Mandate for leadership. Policy management in a conservative administration. Washington, DC: Heritage Foundation.
- Hurd, P. D. (1986). Perspectives for the reform of science education. Phi Delta Kappan, 67(5), 353-358.
- Laswell, H. D. (1975). The future of government and politics in the United States. In L. Rubin (Ed.), The future of education: Perspectives on tomorrow's schooling (pp. 1-21). Boston: Allyn & Bacon.
- National Council on Education Standards and Testing. (1992). Raising standards for American education. A report to Congress, the Secretary of Education, the National Education Goals Panel. Washington, DC. (ERIC Document Reproduction Service No. ED 338 721)
- Park, J. C. (1980). Preachers, politics, and public education: A review of right-wing pressures against public schooling in America. Phi Delta Kappan, 61(9), 608-612.
- Peters, T. K. & Waterman, R. H. (1982). In search of excellence: Lessons from America's best-run companies. New York: Warner.
- Reich, R.B. (1991). The work of nations: Preparing ourselves for 21st-century capitalism. New York: Alfred A. Knopf.
- Riley, R. (1984, January). Untitled news release from the Office of the Governor. Columbia, SC.
- Rugg, H. (1927). The school curriculum and the drama of American life. In G. M. Whipple (Ed.), The foundations and technique of curriculum construction. Twenty-sixth yearbook of the National Society for the Study of Education, Part I (pp. 119-134). Bloomington, IL: Public School Publishing.
- Spring, J. (1988). Conflicts of interest: The politics of American education. New York: Longman.
- Toffler, A. (1980). The third wave. New York: Morrow.
- Willoughby, S. S. (1983). Mathematics for 21st century citizens. Educational Leadership, 41(4), 45-50.

* * * * *

Note: Names of those interviewed in South Carolina are not presented due to an agreement that confidentiality of tape-recorded interviews and anonymity would be honored.