Those who, during the 1960s, predicted a trend toward the increased use of electronic media in English instruction did not foresee the incompatibility of the humanities graduates of publishing houses and the engineers and mathematicians of the electronics industries, or the resistance of teachers and administrators to instructional innovation. Similarly, such forecasts in the 1970s failed to anticipate shifts in the economy and in the values of the young. The current conservative mood of the country, censorship and the back-to-basics movements, civil rights and women's movements, and the reductions in federal funding are also factors beyond most English educator's foresight. Nevertheless, teacher educators must continue to help teachers anticipate and responsibly direct the course of educational change, much of which will occur due to the increasing accessibility of microcomputers. The traditional classroom will, of necessity, give way to more flexible, individualized instructional environments, and will include electronic media and improved printed materials. All of these changes are dependent on a healthy economy, the willingness of citizens to give financial and moral support to public education, and the quality of teacher preservice and inservice programs. If teacher educators continue to ignore the potential enrichment of English teaching offered by electronic media, they will assist in making more irrelevant to public school students a subject too many already consider irrelevant. (HTH)
AND IT SHALL MAY COME TO PASS: SPECULATIONS
ON THE FUTURE OF ENGLISH EDUCATION

EDMUND J. FARRELL
THE UNIVERSITY OF TEXAS AT AUSTIN

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If I appear hesitant to make bold pronouncements about the future of English Education, that hesitancy is hard earned. Having more than once in my professional career labored to foresee the forces that would shape our ends, I have learned from hindsight the dangers of foresight, the ways by which the unextrapolated, the unintuited, the unforeseeable can wrench, distort, even break asunder the patterns that logically and inexorably should have led persons, institutions, and societies from here to there, from now to then, from present to future. They who would be visionaries are fated always to peer into opaqueness, though unquestionably some seers possess crystal balls that seem less opaque, better composed, more lustrous, and more generative of gleanings than do those of others.

Bedazzled by Marshall McLuhan's electric rhetoric and buoyed by Buckminster Fuller's verbal odysseys into bountiful futures, in 1967 I wrote English, Education, and the Electronic Revolution (NCTE). In it I forecast the immediacy of a revolution in the teaching of English, one that through radio, film, television, tape recorder, phonograph, record, and computer would displace the teacher as purveyor of information and dislodge the book from its centrality in the classroom. My conviction that the traditional classroom would soon be transformed was given support by the rapid mergers in the 1960s of publishing houses and electronic industries: IBM acquired Science Research Associates; Raytheon Company purchased D. C. Heath; Xerox Corporation bought American Education Publications, Basic Systems, Inc., and Ginn and Company; Random House, after
purchasing Knopf, merged with Radio Corporation of America. Implicit in those mergers, I believed, was not only the wedding of word and image, but the promise of rapid dissemination within the schools of media that would end the lockstep of grade/age placement, that would permit a far greater degree of self-paced instruction, of tutorials, and of small-group instruction than had hitherto been known. My efforts at prescience were enfeebled by my ignorance, some of it forgiveable, much of it not. I did not know—nor did those who forged the mergers realize—the depth of incompatibility between publishing companies and electronic industries, the former inhabited largely by graduates of the liberal arts and the latter, largely by mathematicians and engineers. The pace at which each moved, the language that each employed were alien to the other. That aside, I should nevertheless have realized how resistant to change any institution is. Even if mergers had resulted in the rapid creation of software programs for computers and of high-quality educational films and tapes, even if schools had possessed the capital to purchase those products, the educational system would not have been ready for them. Like all creatures of habit, administrators and teachers would have resisted any innovations that threatened to upset the patterns of their work and to force upon them a redefinition of professionalism. Accustomed to the seeming orderliness of traditional methods of processing students, administrators would not have welcomed flexible curricular structures, while teachers, comfortable with textbooks and accustomed to being conductors
OF RECITATION, WOULD HAVE BALKED AT BEING DISLOCATED BY ELECTRONIC WIZARDRY.

INCREASINGLY CONSCIOUS OF THE NEED TO HELP TEACHERS ANTICIPATE AND KNOWLEDGEABLY PARTICIPATE IN CHANGE THROUGHOUT THEIR PROFESSIONAL CAREERS, I FASHIONED IN 1969 A STUDY THAT BECAME MY DOCTORAL DISSERTATION AND THAT NCTE PUBLISHED IN 1971 UNDER THE TITLE DECIDING THE FUTURE: A FORECAST OF RESPONSIBILITIES OF SECONDARY TEACHERS OF ENGLISH, 1970-2000 A.D. FOR THE STUDY, I EMPLOYED AS FORECASTERS FOUR PANELS OF EIGHTY EXPERTS, APPROXIMATELY TWENTY EACH IN LEARNING THEORY, EDUCATIONAL TECHNOLOGY, SECONDARY CURRICULUM, AND ENGLISH. THROUGH A SEQUENCE OF QUESTIONNAIRES, I ASKED THE PANELISTS NOT ONLY TO DESCRIBE THE INNOVATIONS THEY BELIEVED WOULD OCCUR WITHIN THEIR FIELDS OVER THREE DECADES, BUT THE PROBABILITY WITHIN FIVE-YEAR PERIODS THAT AT LEAST 20 PERCENT OF SECONDARY SCHOOLS WOULD BE AFFECTED BY A GIVEN INNOVATION. TO PLACE THE PANELISTS' FORECASTS INTO A WIDER SOCIAL CONTEXT THAN THE SCHOOLS THEMSELVES, I EXAMINED CHANGES EXTERNAL TO FORMAL EDUCATION THAT MIGHT LIKELY OCCUR IN THE FUTURE AND THAT MIGHT THEREBY ALTER THE SCHOOLS FOR BETTER OR WORSE. TO THAT END, I BRIEFLY LIMNED SUCH TOPICS AS WORLDWIDE INCREASES IN POPULATION; NATIONAL AND INTERNATIONAL GROWTH OF VIOLENCE, WEAPONRY, AND WAR; CONSERVATION AND DEPLETION OF NATURAL RESOURCES; SOCIETAL EFFECTS OF LARGE-SCALE URBANIZATION; EVOLVING PATTERNS OF INCOME AND EMPLOYMENT; GROWTH, STORAGE, AND RETRIEVAL OF KNOWLEDGE; BIOLOGICAL, PHARMACOLOGICAL, AND ELECTRONIC ALTERATION OF HUMAN BEHAVIOR; AND EFFECTS OF TECHNOLOGICAL CHANGE UPON SOCIAL VALUES.
THOUGH I MAKE NO APOLOGIES FOR WHAT I WROTE, MUCH OF IT NOW STRIKES ME AS BEING NAIVE OR QUAIN'T. THOUGH I HAD READ DOZENS OF FUTURE STUDIES AS BACKGROUND TO MY STUDY, I WAS UNPREPARED FOR OPEC—WHAT FUTURISTS CALL "A MAJOR SYSTEMS BREAK"—AND ITS EFFECTS ON THE NATION’S ECONOMY AND ON THE INTERNATIONAL DISTRIBUTION OF WEALTH. I FAILED TO ANTICIPATE A MAJOR SHIFT OF VALUES AMONG THE YOUNG, FROM POLITICAL AND ECONOMIC DISSIDENCE TO BOURGEOIS CONFORMITY, AND ALONG WITH THAT CONFORMITY, FROM LARGE-SCALE DISAFFECTION FROM THE LIBERAL ARTS TO POCKET-BOOK COMMITMENT TO PROFESSIONAL AND VOCATIONAL EDUCATION. NEITHER I NOR THE AUTHORS I HAD READ FORESAW HOW HIGH AND HOW LONG INFLATION WOULD RIDE THE ECONOMY, OR HOW PERVERSIVE ITS ERODING EFFECTS WOULD BE ON THE DAY-TO-DAY QUALITY OF AMERICANS' LIVES AND ON THEIR PLANS FOR THE FUTURE.

THOUGH ANYONE MIGHT HAVE GUESSED THAT THE FREE-SWINGING LIBERALITY ASSOCIATED WITH VARIOUS MOVEMENTS OF THE 1960s AND EARLY 1970s WOULD LEAD INEVITABLY TO A CONSERVATIVE BACKLASH, I DID NOT: I AM STILL PUZZLED BY HOW QUICKLY AND WITH WHAT STRENGTH THE FAR RIGHT HAS RISEN, BY THE NATIONAL POWER IT EXERCISES OVER TEXTBOOK ADOPTIONS AND OTHER CURRICULAR MATTERS. COINCIDENTAL TO THE REDUCTION OF THE LANGUAGE ARTS CURRICULUM THROUGH ORCHESTRATED CENSORSHIP HAS BEEN ITS REDUCTION THROUGH THE BACK-TO-THE-BASICS MOVEMENT, A MOVEMENT THAT HAS STRIPPED SIGNIFICANCE FROM ORAL COMMUNICATION, FROM LISTENING, AND FROM LITERATURE, VESTING IT INSTEAD IN LOW-LEVEL SKILLS OF FUNCTIONAL READING AND WRITING. THE MOVEMENT IS ONE WHOSE PERSISTENCE AND PERVERSIVENESS I DID NOT FORESEE A DECADE AGO.
Nor, for that matter, did I adequately sense that the civil-rights and women's movements, by broadening job opportunities for women and members of minorities, would adversely affect the pool of candidates entering teaching. From what I currently read in educational journals, students electing to become public school teachers are scoring as a group in the bottom quintile of those taking the Scholastic Aptitude Test. As a profession, teaching appears to have little attraction for the best and the brightest. Finally, neither I nor the futurists whose work I consulted foresaw—in what should have been the foreseeable future—wanton reductions in federal finances for education, reductions that have been proposed and advocated by the Reagan administration.

If confession is good for the soul, mine by now should be, if not squeaky clean, at least less burdened. Clearly, in 1967 and in 1971, through oversight and want of foresight, I missed much that is with us at present. Nevertheless, I remain as persuaded as I was fifteen years ago that those of us involved in the professional education of teachers of English must help mitigate the institutional inertia inherent in schools if we wish them to be what they less and less are—vital centers of learning for the young. To help reduce inertia, I believe that we are morally obliged to help teachers, whether they be prospective or practicing, anticipate and responsibly direct the course of educational change. Further, I continue to believe that that change in good part will result from the steady intrusion into education of computers and of nonprint
media. An inevitable concomitant to that intrusion will be the long-anticipated erosion of age/grade/subject placement, with its stifling effects on individual motivation and creativity.

Fifteen years ago English teachers would have resisted having to learn the educational uses of video cassette or laser disc recorders, broadcast and cable television, computer-assisted instruction, cassette recorders, and other non-book media. But the computer is now so ubiquitous in the society, as are video cassette and video disc recorders, that more and more English teachers, rather than resisting their use, are flocking at conventions to those few sessions that offer them "hands-on" experience. Moreover, while computer software did not follow hard upon the mergers in the 1960s of publishers and electronic industries, it is becoming increasingly available and, though still largely intended for supplementary drill and practice, increasingly sophisticated. According to an article ("Textbook Publishers and Computer Software Programs") appearing in the February 1982 issue of Media and Methods, a number of publishing houses are now offering computer software programs in reading and language arts, among them, Houghton Mifflin, McGraw Hill, SRA, Random House, and Scholastic.

Because of microcircuitry, both the size and the cost of computers have dramatically decreased within the past decade, with the result that Arthur Malmed, in an article titled "Information Technology for U.S. Schools" (Phi Delta Kappan, January 1982) estimates that elementary and secondary students
IN 1990 COULD "ENJOY A COMPUTER-ENRICHED INSTRUCTIONAL PROGRAM AVERAGING 30 MINUTES A DAY" FOR A COST OF ABOUT $30 PER STUDENT PER YEAR, "INCLUDING THE COSTS OF EQUIPMENT, MAINTENANCE, COURSEWORK, AND MATERIALS OTHER THAN COURSEWARE." IF MR. MALMED'S ESTIMATION BECOMES REALITY, I WOULD HOPE THAT STUDENTS WOULD SPEND MORE OF THEIR ALLOCATED 30 MINUTES IN PROGRAMMING THE COMPUTER TO THEIR OWN ENDS THAN IN FOLLOWING THE MANDATES OF COMMERCIALLY PREPARED PROGRAMS, AS CAREFULLY DEvised AS THOSE PROGRAMS MIGHT BE. AS MY OWN TWO YOUNGSTERS HAVE DISCOVERED, THE COMPUTER CAN BE A VEHICLE ON WHICH TO CREATE FOR ONESELF AS WELL AS ONE ON WHICH TO BE PROGRAMMED BY OTHERS.

DESPITE THE UBIQUITY OF ELECTRONIC MEDIA AND DESPITE EVER GREATER WILLINGNESS FROM TEACHERS TO PUT THESE MEDIA TO USE, THE TYPICAL ENGLISH CLASSROOM CONTINUES TO LOOK AS STERILE AS IT DID IN THE DAYS OF GRADGRIND. ROW UPON ROW OF DESKS CONTINUE TO FACE THE FRONT OF THE ROOM, AS THOUGH THE TEACHER WERE THE ONLY WORTHY PERSON IN SIGHT WITH WHOM TO DIALOGUE. ABSENT ARE NOT ONLY TELEVISION SETS, RADIOS, VIDEODISC RECORDERS, CASSETTE TAPE PLAYERS, FILM PROJECTORS, RECORD PLAYERS--ALL OF THE "ELECTRONIC SURROUND" IN WHICH STUDENTS LIVE THEIR LIVES OUT OF SCHOOL--BUT BOOKS AND PERIODICALS AS WELL. IT IS A RARE CLASSROOM THAT SPORTS A LIBRARY WORTHY OF THAT NAME, AND IT IS A RARER TEACHER STILL WHO WOULD THINK TO PLAY CLASSICAL MUSIC ON AN FM RADIO AS BACKGROUND TO COMPOSING.

IF I AM SURE OF ONE THING, IT IS THAT THE TRADITIONAL, BARREN CLASSROOM AS FOCAL POINT FOR LEARNING IS NOT HOLDING, CANNOT HOLD. REPEATEDLY THE PANELISTS WHO CONTRIBUTED OVER A
A decade ago, Deciding the Future envisioned its demise by the year 2000. Permit me to quote a handful of overlapping generalizations from that 1971 monograph, generalizations derived from forecasts of the panels:

Lockstep instruction will disappear as greater emphasis is placed upon student-paced, continuous-progress learning. The most effective instructional procedures for different learning tasks and different students will be determined, and the computer will assist the teacher in selecting appropriate learning materials for each child. (Deciding the Future, pp. 114-5)

There will be increased use of TV instruction. The computer will be used for teaching definite and indefinite rule-bound structures, such as spelling, grammar, and rhetorical strategies for composing; further, it will be programmed for instruction that allows conversational dialogues using natural language. Individual study stations will be developed to deliver promptly whatever materials—pictures, books, tapes, filmstrips, films—the student needs; and the teacher could become mainly a manager of instructional environments rather than principally a transmitter of knowledge and skill. (Ibid., p. 115)

Students will have available to them improved printed materials of many types—paperbacks, short books with specific purposes, tutorial books, books that will send them to other experiences and resources and back to books again. Classrooms will have wall television screens on which can be projected both current events and lifelike reenactments of major scientific and cultural events. Cassette-
TYPE TAPE RECORDERS AND EXTENSIVE LIBRARIES OF MODERATELY PRICED AND TESTED FILMS WILL BE INSTANTLY AVAILABLE TO TEACHERS AND STUDENTS.

Eventually television will be used as an information retrieval system as well as a school broadcast system; and by the last half-decade of the century, students may have available to them learning carrels both with built-in audio, visual, or audiovisual resources and with facilities for response to or communication with a computer. (Ibid., pp. 124-5)

Through the computer, students will be able to retrieve data on demand from multi-media, multi-mode data banks; further they will have access to computers through telephone lines in their homes. To lighten the teacher's load, the computer will compile students' records and provide continuous reports of students' progress. (Ibid., p. 125)

Silent and sound motion pictures as well as productions on television will be taught as literary media. Closed-circuit and broadcast TV, tape recorders, and videotape recorders will be available to each classroom for instructional use. Learning centers will make accessible to students a variety of media for large-group, small-group, or individual instruction. The ready availability and frequent use of these audio and nonprint visual media will result in their receiving greater emphasis for learning than does print. (Ibid., pp. 157-8)

Whether the panelists' prognostications become fact or whether they remain pie in the sky depends upon a number of factors, including the health of the economy, the willingness
OF CITIZENS TO GIVE FINANCIAL AND MORAL SUPPORT TO PUBLIC EDUCATION, THE ABILITY OF THE NATION TO AVOID NUCLEAR WAR--AN EVENT WHICH WOULD RENDER ALL FORECASTS ACADEMIC--AND THE QUALITY OF PRESERVICE AND INSERVICE PROGRAMS AVAILABLE TO TEACHERS. IF THE FUTURE ENVISIONED BY THE PANELISTS IS TO BE GUIDED INTO A HEALTHY EXISTENCE, THEN THOSE OF US WHO PROFESS ENGLISH EDUCATION WILL NEED TO GO WELL BEYOND OUR CONCERN FOR THE BOOK, AS CRITICAL AS THAT MEDIUM WILL REMAIN BOTH TO OUR SUBJECT AND TO HUMAN LEARNING. WE WILL NEED TO INCORPORATE INTO BOTH OUR UNDERGRADUATE AND GRADUATE PROGRAMS NOT ONLY INFORMATION ABOUT BUT PRACTICAL EXPERIENCE WITH NON-PRINT MEDIA AS THESE MEDIA NOW AFFECT, AND AS THEY PROMISE TO AFFECT, THE TEACHING OF ENGLISH. MOREOVER, BECAUSE OF THE DIMINISHED NUMBERS OF UNDERGRADUATE STUDENTS ELECTING TO TEACH ENGLISH AND BECAUSE OF THE RELATIVE STABILITY OF ENGLISH DEPARTMENTS IN THE SCHOOLS, WE WILL NEED TO DEVELOP INNOVATIVE INSERVICE PROGRAMS FOR PRACTICING TEACHERS, PROGRAMS THAT, ON SITE, CAN ASSIST TEACHERS IN USING WISELY AND WELL A FULL SPECTRUM OF PRINT AND NON-PRINT MEDIA.

IF WE IGNORE IN OUR CLASSES AND IN OUR CONFERENCES THE POTENTIAL ENRICHMENT TO ENGLISH TEACHING OFFERED BY ELECTRONIC MEDIA ALREADY AVAILABLE TO OUR USE, WE ASSIST IN MAKING MORE IRRELEVANT TO STUDENTS IN THE PUBLIC SCHOOLS A SUBJECT FAR TOO MANY OF THEM ALREADY FIND IRRELEVANT. CONTINUING DOWN THAT PATHWAY ONLY HASTENS THE TIME THAT ENGLISH AS A SUBJECT, LIKE THE ANCIENT CLASSICS AS A SUBJECT, DWINDLES INTO INSIGNIFICANCE.

THAT DISMAL FUTURE NEED NOT BE.