

James Downey

**The Third Wave: Ripple or Breaker?
Education in the Eighties***

My topic is 'The Third Wave: Ripple or Breaker? Education in the Eighties,' in which I attempt to peer a bit into the future. I do so with much diffidence. My credentials for futurism are not impressive. My instincts are all against it. My training has rendered me wary, perhaps incapable, of it. By choice, training, and temperament/I am a humanist. More specifically and professionally I am a literary scholar and teacher.

Now in a world of quantitative and multivariate analysis, of socio- and econo-metrics, of matrices, macro-indicators, parameters and priorities, to profess oneself a humanist seems at best anachronistic; at worst, incorrigibly limp: like being a member of the Flat Earth Society or the Royal Order of Rosicrucians. Without apology, however, I shall attempt to describe my own tenets of pedagogical faith. But before doing so I should like to give some account of the book that has triggered all this mental and verbal perambulation on my part: Alvin Toffler's *The Third Wave*.

I greatly enjoyed reading *The Third Wave*. It was, for me at least, full of fresh ideas, information, and insights, and it made some exciting connections and synthesis. Not that there is anything new in the general thesis of the book, which is that industrial civilization, having become too reliant on erstwhile cheap raw materials and non-renewable sources of energy, and burdened by inefficient systems of decision making, is about to collapse. What *is* new and refreshing is that, as Jerry Adler has put it, "somewhere in writing this book, Toffler suffered a failure of pessimism, and ... emerges with a unique — and guarded — conclusion: that 'beneath the clatter and jangle of seemingly senseless events there lies a startling and potentially hopeful

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pattern ... the human story, far from ending, has only just begun." (*Dialogue*, Number 51. 1/1981, p. 8) The potential new beginning is the Third Wave.

The mood of the book is apocalyptic. Western civilization has reached a point of dramatic transformation. Toffler's language is less opaque and thunderously prophetic, but its emotional cargo reminds one of William Blake:

A new civilization is emerging in our lives, and blind men everywhere are trying to suppress it. This new civilization brings with it new family styles; changed ways of working, loving, and living; a new economy; new political conflicts; and beyond all this an altered consciousness as well. Pieces of this new civilization exist today. Millions are already attuning their lives to the rhythms of tomorrow. Others, terrified of the future, are engaged in a desperate, futile flight into the past and are trying to restore the dying world that gave them birth.

Until now the human race has undergone two great waves of change, each one largely obliterating earlier cultures or civilizations and replacing them with ways of life inconceivable to those who came before. The First Wave of change—the agricultural revolution—took thousands of years to play itself out. The Second Wave—the rise of industrial civilization—took a mere three hundred years. Today history is even more accelerative, and it is likely that the Third Wave will sweep across history and complete itself in a few decades. We, who happen to share the planet at this explosive moment, will therefore feel the full impact of the Third Wave in our own lifetimes.

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That's pretty heady stuff. Even if the show is only half as exciting as announced, it will be worth the price of admission. Especially so since nothing seems to be asked of us except that we strip off the heavy, sweaty, and greasy garments of industrial civilization and let the warm wave of inevitable and enlightened progress wash over our vitamin-enriched bodies and our computer-assisted minds. But human nature and society being what they are, this felicitous embrace with benevolent destiny may prove more difficult than it first appears. There is enough humbuggery about to ensure the universe won't unfold as it should; organized, professionalized, institutionalized, even - in some cases - unionized humbuggery. And who are these enemies of light? Let Mr. Toffler speak:

During the transition to the new society, wherever the jobs remain scarce, Second Wave labor unions will undoubtedly fight to exclude young people from the job market outside the home. Unions—and teachers, whether unionized or not—will continue to lobby for ever-longer years of compulsory or near-compulsory schooling. To the extent that they succeed, millions of young people will continue to be forced into the painful limbo of prolonged adolescence.

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Such neanderthals, however, are merely pissing into the wind — a veritable gale at that. For, as the needs of society change, so too will education:

More learning will occur outside, rather than inside, the classroom. The years of compulsory schooling will grow shorter, not longer. Instead of rigid age segregation, young and old will mingle. Education will become more interspersed and interwoven with work and more spread out over a lifetime. And work itself will probably begin earlier in life than it has in the last generation or two.

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Second Wave work, by and large, was “repetitive, specialized and time-pressured and employers wanted workers who were obedient, punctual and willing to perform rote tasks.” The schools ensured that their products were so trained. All that will change — is, indeed, changing:

As the Third Wave cuts across our society, new de-massifying technologies, new organizational styles and the growing resistance of workers to brutalizing monotony begin to transform the nature of work. Work grows less, not more, repetitive. It becomes less fragmented, each person doing a somewhat larger task. More and more employees work only part time out of choice. Flextime and self-pacing replace the old need for mass synchronization of behavior. Workers are forced to cope with more frequent changes in their tasks and with a blinding succession of personnel transfers, product changes and reorganizations.

[Thus the new system] penalizes workers who show blind obedience. It rewards those who—within limits—talk back. Workers who seek meaning, who question authority, who want to exercise discretion or who demand that their work be socially responsible may be regarded as troublemakers in Second Wave industries. But Third Wave industries cannot run without them.

Across the board, therefore, we are seeing a subtle but profound change in the personality traits rewarded by the economic system—a change which cannot help but shape the emerging social character.

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I feel the same way about this characterization of the so-called industrial society and the education systems that have served it as I do about much Marxist analysis of society: there is indeed truth in what is being said, but there is an unintended and undermining element of parody as well. The world always looks uninhabitable from a spaceship, and I fear that, in an effort to observe its broadest outlines, Toffler has removed himself rather too far from Second Wave culture to see any of its redeeming and endearing features.

One of these redeeming features has been the spread of mass education and the personal and social forms of liberation and fulfilment it made possible. Obedience, punctuality, and rote tasks were indeed often part of that process, but they were, for the most part, only means to an end. And the end was not, as Toffler suggests, just the internalizing of traits to make people more productive workers. The end was also to liberate men and women from appalling ignorance and superstition, from illiteracy and innumeracy, from awkwardness and incompetency. It was in part to give them the mental tools and knowledge to examine their own lives and values and those of their society. To the extent that it succeeded it helped them to create out of the society they lived in a vision of a society they wanted to live in. It would be easy to overdo this theme; it too could become an unintended parody. Nevertheless, it too contains a truth and is a necessary counterpoint to Toffler's truncated depiction of the Second Wave worker and his or her education.

It may indeed be true that in the future more learning will occur outside the classroom (when indeed has it not?) but the notion that the 'electronic cottage' will in time replace the school, I find hard to swallow. It seems such a patent romantic retreat into rusticity in the face of the horrendous problems that afflict so many urban and suburban schools in the States. No one can blame Toffler or anyone else for wishing to escape from the blackboard jungle that so many American schools have become. But an 'electronic cottage'?

Mark Twain once said: 'Rumours of my death have been much exaggerated.' Predictions of the imminent demise of schools have been made before. They have always proved much exaggerated. What, in my view, Toffler fails to appreciate — or, at least, to acknowledge — is that schools are much more than places where information is transmitted and socially useful skills and habits learned. Despite their constant litany and lamentation about having to go there, children depend upon school to stimulate, challenge, and engage them in a way that only an organized and orchestrated collectivity of their peers can do. Toffler and Illich notwithstanding, schools will have a long run yet. They survive for the same reason churches and service clubs survive — for the socializing as well as the socialization. The withering away of the schools, like the withering away of the state, is still a long way off.

In failing to appreciate the purposes other than socialization served by education, Toffler also misconstrues, I believe, the essential nature of the changes taking place in our educational systems and in society. Impressed (and who isn't)? by the mind-blowing advances made in the past decade or two in the field of electronic communications, he concludes that a comparable transformation is about to take place in

our social order and character. I am more inclined to think that what we are seeing at the moment is another movement in the endless dance of the dialectic (to adapt an expression of Larry Zolf's). However we choose to characterize the typology — community vs. individuality; rights vs. responsibilities; reason vs. emotion; ego vs. id; or, at a more philosophical level, classicism vs. romanticism — social norms, values, and behaviour do seem to oscillate between two polarities. In some periods, as the dialectic approaches one pole or the other, anxiety and expectation mount. Is this the time when the pendulum, instead of swinging back, goes flying off into space? And, if it does, will that be catastrophic or redemptive?

For many in Western society the sixties were a time when it appeared the centre would not hold. The movement towards one extreme was dramatic. For the young it was exhilarating; for their parents it was alarming. It was, as Northrop Frye has said, a liquid time. Keeping things stirred up and breaking down structures were the thing. 'I've gotta be me,' 'Doing my own thing,' 'That's not my bag' — the catchwords revealed a radical individualism; even, some thought, anarchy. The prevailing philosophies were Existentialism and Phenomenology, both of which stress individual perception, choice and action.

The effect of that on education was, predictably, to accentuate the child-centred approach. In the jargon of the time (and a literary critic takes his clues from such jargon) the 'educational experience' was all. Children should be allowed to enjoy their childhood. An antipathy to discipline, obedience, 'structured' curricula, and rote learning was a concomitant part of this shift.

No sooner had our educational systems adjusted themselves to these new social values than the music for the dialectical dance changed again, and just as abruptly. As though horrified at what we had done, or nearly done, the night before, in the cold grey daylight of the seventies we repented and, once again, embraced conservatism, order, and structure. Liquids gave way to solids in our mindsets and our language. 'Structure,' which was almost an obscenity in the sixties, has become a talismanic word. People talk of the need for more solid structures and of better 'mechanisms.' And for the past ten years 'Structuralism' has been the most influential force in literary criticism, philosophy, and social science.

Hand in hand with this has gone a demand for more 'structure' in curriculum and greater emphasis upon 'the basics.' One hears little about the 'educational experience' any more. 'Literacy,' 'numeracy,' and the 'discipline of learning' are the catchwords of the moment. A subject-centered emphasis in education continues to gain strength.

And it is here that Toffler's thesis appears curiously out of step with the tempo of the times. Its apocalyptic optimism is at odds with what I take to be the conservative evolutionaryism of the present. Indeed, for all its exciting futurism, *The Third Wave* seems, in spirit at least, a book of the sixties: *Future Shock* without tears. The future it adumbrates is one in which all of this cheap and wonderful cybernetic gadgetry will set us free to engage in new and fulfilling forms of social interaction and organization.

Predictably, for Toffler, 'back-to-basics' is a retrograde step; a last-ditch stand by Second Wavers to protect their endangered preserves. To quote:

Finally, there are movements aimed at literally turning back the clock — like the back-to-basics movement in United States schools. Legitimately outraged by the disaster in mass education, it does not recognize that a de-massified society calls for new educational strategies, but seeks instead to restore and enforce Second Wave uniformity in the schools.

Nevertheless, all these attempts to achieve uniformity are essentially the rearguard actions of a spent civilization.

The Third Wave, p. 256.

Consistent with this is Toffler's attitude toward literacy:

Is literacy, for example, an appropriate goal? If so, what does literacy mean? Does it mean both reading and writing? In a provocative paper for the Nevis Institute, a futures research center in Edinburgh, the eminent anthropologist Sir Edmund Leach has argued that reading is easier to learn and more useful than writing, and that not everyone needs to learn to write. Marshall McLuhan has spoken of a return to an oral culture more in keeping with many First Wave communities. Speech recognition technology opens incredible new vistas. New, extremely cheap communications 'buttons' or tiny tape recorders built into simple agricultural equipment may ultimately be able to give oral instructions to illiterate farmers. In the light of these, even the definition of functional literacy requires fresh thinking.

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Is the back-to-basics movement the rearguard action of a spent civilization? Is literacy an obsolescent objective? I don't think so. The reference to McLuhan — the 'communications' guru of the sixties — in this last quote is instructive. Like McLuhan, Toffler tends to forget that language is more than a system of communication: it is a medium — the primary medium — of discovery as well. It is the way in which we explore our minds and hearts and discover and define what we're like and who we are. It's the way in which we make sense of the endless flux of experience. 'In the beginning was the Word.'

Literacy, therefore, is basic in a sense that goes beyond our ability to write letters or essays or reports; it is basic in a sense that goes well beyond what we normally mean by 'communicating.' For most of us it is basic to our sense of our own identity and worth and to an expression of them. (I say 'for most of us' because I realize that there are some for whom a special gift of music or artistic creativity or mathematical genius makes another form of expression paramount.) For this reason, and even while dissociating myself from the rhetoric of denunciation of educational tendencies in the sixties, I welcome the renewed emphasis on the so-called basics. I just hope we can remember or define what they are basic to.

My own sense of the value of this approach to education was confirmed by an experiment I conducted recently in preparation for this address. Mr. Rod Campbell in his letter of invitation to speak at this conference suggested that I comment in my remarks on 'changes required in both secondary and post secondary education over the next decade and perhaps ... on expectations of universities for graduates of Senior High Schools.' In light of this suggestion I wrote to about ten people on the UNB faculty in different subject areas, people chosen for their demonstrated interest in the secondary-post secondary educational interface, and asked them for their own views on the matter. All of them are more familiar than I with New Brunswick education and in a better position to observe the qualities and qualifications students bring with them from high school to university. It would take more time than I have available to summarize the responses to my request. I shall instead make a couple of observations based on these responses that are germane to my topic.

First, there was no complaining about the general quality of the students coming into university. While there was an insistence throughout the submissions on the primacy of literacy — both verbal and numerical — in the process of education, there was none of the lament that one hears often these days about declining standards of writing and mathematical skills. It may be, of course, as one respondent pointed out, that, if deficiencies exist, we at UNB must take our share of the blame inasmuch as 'the syllabi in most subjects have been prepared with the co-operation of UNB faculty, and the teaching is generally done by teachers holding UNB degrees.' Such a realization tends to temper criticism.

I believe, however, that there is something more positive than that at work, and it's best summed up by the same respondent:

A good many favourable things can be said about the New Brunswick curriculum from an academic perspective. The school system never adopted the cafeteria form which characterized the Ontario curriculum.

Every student in the English Language system is required to study English, History, French and Mathematics in Grade 10, English, History and Mathematics in Grade 11, and English in Grade 12, in addition to a compulsory Science credit. On balance, the curriculum comes very close to what I consider the foundation of a sound secondary school liberal education. This, of course, is a matter of personal philosophy. Many of my colleagues would argue that the only essential things in a high school program are writing and mathematical skills. I strongly disagree. Important though these are, they are only tools, and a high school student by the age of 18 should have been exposed to the major intellectual traditions, and to the methods through which man has studied himself and his world. Mathematics, History, Science and English Literature each provide a vital dimension to this experience through the exploration of logic, the natural world, human society in time and in imagination. In addition to these, the knowledge of another language is an essential cultural experience. The present curriculum largely meets these demands.

My second observation on these responses is to note their insistence throughout of the importance of linguistic and mathematical competence to university work and success. This was predictable but, in light of Toffler, worth hearing, especially from people in such diverse areas as engineering, business administration, and sociology. One respondent seemed to speak for all when he wrote:

As computers become ever cheaper and ever more powerful, the citizen will require more, not less, ability to handle the language. Our graduates will have to be able to state these clearly and also to penetrate to the core of complex arguments. So, too, as the media become ever more pervasive and ever more persuasive, we must produce graduates capable of piercing through to the reality behind the rhetoric. In fine, our graduates must be capable of accurate writing and accurate analysis of language.

It is obvious from the submissions, however, that it isn't just a matter of returning to the three R's and drilling them in. While at the deepest levels the basics have remained the same, at the level of pedagogical method there are new factors which have to be accommodated. Education can and must respond to technological innovation. As my Faculty of Education respondent put it:

At present, our system tends to resist such change. We live in an age of advanced technology in terms of means of verbal communication (word processors, videotape, etc.) and numerical communication (calculators, computers). Most of our teachers and future teachers avoid this technology. They tend to believe that if the type of schooling they had, without such paraphernalia, worked for them, it should work for their students. So we transmit, for example, years of information about how to perform calculations which we no longer require instead of accepting change and taking advantage of it to free us to do more interesting things. What is worse, though, than the missed opportunity is the transmission of the reluctant attitudes.

The place of the calculator in the teaching of mathematics is a case in point, according to my Mathematics Department respondent:

Teachers will complain, coax, dictate and worry; but the calculator is here to stay. It may even make it possible to teach math with relatively little of the 'old school' drill. We will always need to know how to *estimate* answers, but exact computations and algorithms like long division may become the domain of the expert alone.... Within five years, pocket calculators will be able to do all of the high school mathematics. The Math teacher may become a new breed of linguist; problems expressed in English must be converted to mathematical expressions. Soon this will be all a high school teacher need teach, for the remainder of the problem can be done on a calculator.

The same may be said, only more extensively, of computers, where applications to almost every field and subject of learning are being developed, placing an onus on teachers to learn in order that they may teach.

A third and final observation that I should like to make, supported by my respondents' comments, is that the most important thing to be taught in the eighties (as in any other decade) is the independence of mind that will enable students to go on learning and mastering on their own beyond school and throughout life. This demands more of teaching than the communication of information and ideas; more even than the mastery of the basic skills of reading, writing, and mathematics. It requires the development in students of the mental skills and strategies and confidence to address problems and resolve them, or at least to understand why they cannot be resolved — yet.

Fragmentary though they are when thus presented, these comments from my UNB colleagues give some specificity to an important point I wish to make, perhaps to correct an impression I might have left in talking about *The Third Wave*. While I don't buy Toffler's notion of a social and educational revolution in the eighties, I do nonetheless believe that change is occurring, and at an accelerated rate. Furthermore, I believe we must, as teachers, understand the nature of these changes and help our students to do so as well. But we will accomplish both tasks best if we do so in the context of an educational philosophy that is firmly rooted in humanist principles.

And what is basic to education as a humanist sees it? What is it that teachers, at whatever level, should attempt to inculcate? What is it that will give our students the wherewithall to fashion not only better careers but more fulfilling lives? In my view, there are four things which are fundamental to a humane education. This is not to claim that humanists have a monopoly on these qualities or that this is the only way to represent them. Nor is it to deny any of the points made

earlier in this paper about other, more practical, skills and knowledge necessary to a full and rounded education. It is merely to say that these four seem to me basic in the sense that they address the issues and potential that are most quintessentially human.

First, *language*. From Aristotle to the nineteenth century the generally accepted definition of man was 'the rational animal.' In the twentieth century, however, the emphasis has shifted from reason to language: man is now the linguistic animal. Thus the concern at every level of education for the study of language is, in the first place, a concern to discover and explore what is essentially human.

To study language properly is to examine it in all its complexity, diversity, and intrigue. What are syntactic and grammatic structures and how are they learned? What is the relationship between language and culture? Between language and religious experience? Between language and critical judgment? Between language and philosophical analysis? What does it mean to talk of linguistic rights? To what extent does the language we speak and write condition our perception and shape our experience? Under what conditions does language become debased and what are the political and social consequences of such debasement? How can words be combined to produce aesthetic pleasure? These are some of the questions about language that should engage us in our several ways depending upon where and at what level we teach.

But our interest in language must go beyond our attempt to understand it, to a concern for the way in which it is used. To think and speak clearly and to write effectively are not just the mark of an educated person; they are also the precondition of participatory citizenship in a democratic society. To be capable of free speech we must know how to use language, and such knowledge is not merely a gift: it is an art, to be taught, learned and cultivated. No threat to a free society is more real than the inability of its citizenry to use language effectively or the abuse of language by political leaders and professional communicators. What T. S. Eliot asked of poets can well to some extent be expected of all teachers: it is their task to try to purify language, to insist on its integrity, and to advocate and inculcate its precision.

Second, *imagination*. It is expected of the humanities that they should celebrate the great works of the human imagination in all their multifarious originality. Northrop Frye gave a series of CBC talks some years ago in which he argued, with great eloquence and elegance, that the essential purpose of education is to educate the imagination. I believe it to be so, for in the end even our values and value systems are themselves products of the imagination. So too is language and its most sophisticated expression, literature; so too are painting and

architecture, music and film. There are, as well, and of equal importance, the great works of social, political, philosophic, and religious imagination.

The end of such study and celebration of the great works of the human imagination is not just to stand in awe of the imaginative genius of others but to help our students educate their own imagination. To make them less gullible, less vulnerable to the slick and facile values and myths of our own day. To give them standards of judgment and taste by which to measure society and its products, both material and immaterial. To make them in time more their own men and women, less vulnerable to political and commercial hucksterism.

Third, *the past*. It is characteristically human to wish to know and to understand our own provenance, collectively as well as individually. Why do we have this kind of society, this form of government, this technology, these forms of art, these religious observances, these myths? What historical events have forced us to shape our community, our nation, our culture, our civilization? How and why have other cultures and societies evolved differently? Whence arose our present social and political problems and divisions? The truth contained in the answers to these questions may not make us free, but it does lead to a greater tolerance of other people and peoples who differ from us. In doing so it provides a footing for hope, for only in understanding and tolerance can there be found a lasting basis for community and a final justification for education.

Fourth, *values*. The centre of gravity for any humane system of education is a concern for how people live, for the humane dimensions of life — its quality and the values that enhance it. Our concern here should be with those questions which address the issues and principles by which men and women have sought to give meaning to life and order to community. Whence arise our notions of right and wrong, good and evil? How do/should we evaluate situations, courses of action, systems of government, works of art, each other? What other value systems and symbols have evolved in other cultures and civilizations? And how can a knowledge of these enrich and clarify our own? What do we need to know — at this time, in this place, to live ethically and to exercise our full rights and responsibilities in our private and public incarnations? How do we create or discover a system of values which will help us to interpret and assess the complex reality of contemporary life?

These are not questions which fall under the heading of any one set of subject matter. They should pervade the curriculum. Nor will they be answered by words alone. Teaching at its finest is not only a profession, it is (forgive the outdated word) a calling. The quality of

the teacher's life is often more consequential than the quality of the teacher's mind.

Teaching has never been a prestige profession. It has lacked the cachet associated with, for example, law or medicine. And the financial rewards for teachers have never been great. This continues to be so. It has traditionally been, however, the most honoured and revered of professions. And it has been so because at the heart and centre of teaching is not so much a technique as an example. And while the influence of that example may attenuate as students advance, I know from first hand experience of teaching elementary, high school, and university students that it's always there.

I have been more philosophical (and possibly vague) on the subject of education in the eighties than I had intended to be when I started to write this paper. As always, I confess I have used an invitation to speak as an occasion to explore my own mind and 'discover' what I believe. What I believe is that education and teaching in the eighties will be pretty much what is has been in the past, a series of ripples rather than a great breaker. And what I've discovered is that, on education (and perhaps on other things as well) I'm a curious admixture of conservatism and idealism. My conservatism leads me to disbelieve that anything so dramatic as Toffler's revolutionary breaker is about to wash over us. My idealism leads me to wish to capture some of his joyous enthusiasm for the future and for the ripples of change occurring around us, and to share it with my colleagues, friends, and fellow teachers.