

Hugh A. Stevenson

Knowledge and the Future: Perspectives on Canadian Prospects

In October 1976, the Federal Government produced an important working paper addressed to the Canadian people. *The Way Ahead: A Framework For Discussion*¹ is an articulate discussion of our current and future economic and social problems and prospects. As choices are defined and policies are developed to govern Canada's future, the working paper makes clear that the process must take the form of a dialogue with all concerned. Much faith is assumed in the capacity of Canadians to meet the challenging days ahead. Intelligent public participation based on the population's education is fundamental and taken for granted. In this respect the government adopts an aggressively optimistic attitude.

Looking beyond this decade to the 1980's, Canada's economic prospects are excellent. Indeed, they are matched by few other industrialized countries. Canada's opportunities for continued real growth lie in its relative wealth of resources, its highly skilled producing potential, its technology, and of course, its highly skilled and educated population. They lie, not least, in Canadians' capacity for enterprise. But to take advantage of these opportunities, to ensure that our substantial potential is indeed attained, Canadians and their governments will have to meet a number of major challenges...

Canadians have always faced challenges and it would be naive to assume that we will not continue to do so. Recognizing their existence is not cause for pessimism, but necessary in order to face them realistically and resolve them successfully. The coming decades offer tremendous opportunities to Canada and to Canadians. To seize these opportunities, however, requires a shared appreciation of the nature of the prospects and problems confronting us.²

Despite the welcome optimism, it is important to question the productive capacity, performance and general viability of Canada's knowledge base to be found in its educated populace. If, as is widely assumed, there is a close relationship between acceptable societal futures and the Canadian knowledge base, then the question is not only viable but essential. The first recommendation of GAMMA's Conserver Society Project is "the launching of a public debate on the issues . . ." on the apparent assumption that reason will prevail in an educated population in the formulation of public policies for the future.³

the knowledge base of society

The most obvious component of the knowledge base is the school systems across the country. From pre-schools through graduate schools, the bastion of our knowledge base appears easy to locate. The schools educate the citizenry and, at post-secondary levels, also take responsibility for the preparation of professionals and the generation of new knowledge. Through the combination of teaching and research, the educative process is constantly rejuvenated to serve society by keeping its knowledge base strong. Communication with society is done by teaching, or writing or other media and new knowledge is shared from one generation to the next. Societal progress can be monitored; abuses, dangerous practices and ominous trends can be criticized and corrected. For the most part, progress is public, national and international in scope and reasonably democratic. In these respects, it is spoken of as a "system" and considered to be a process by which learning is applied for the general welfare of society and the individual.

In recent years, much has been written regarding this aspect of society's knowledge base. Generally, the literature is of two sorts. One version extols the virtues of such a system and, in an effort to improve and protect its functions, criticizes its workings. The other tends to be more revisionist, suggesting that radical alternatives are necessary to re-tool the education base of society or to replace it altogether. While the revisionist discussion is healthy, thus far it has proven not to be very helpful.

A cursory search for the knowledge base in society reveals very quickly that it is far more diverse than an examination of the school system would suggest. Teaching is done in many other organizations and for many reasons other than progression toward academic credentials. Research and the production of new knowledge are by no means the preserve of universities, nor are the critical functions of

adjusting societies' practices and pointing to new priorities reserved for scholars. Governments, industry, business and other societal organizations, such as private research institutes, all have developed their own teaching, research and critical mechanisms, many quite naturally following the models learned at one time or another in schools. And then, there are the legions of consultants — the knowledge, information and opinion merchants who have infiltrated every level of society, many of whom also teach to fill the time between research contracts or to make their living by performing services not available or accessible readily enough from schools. Multiply this array of teaching, information, and opinion agencies by the number of developed and developing countries in the world, make whatever adjustments are necessary for cultural and ideological differences, add several thousand international agencies which also generate knowledge, and one has a rough approximation of how global society generates, utilizes, and revitalizes its intellectual resources.⁴

The knowledge industry of twentieth-century society in its collective pre-post-industrial grandeur is magnificent to behold. The intellectual base is both extensive and essential. But how well does it work?

On a world basis, it is simply preposterous. Our collective intellect has developed the capacity to generate knowledge, information and opinion monstrously out of proportion to our ability to use it for the welfare of global society. Nor can we digest it critically and so carry on the essential regenerative function of producing more, useful, new conceptualizations to revitalize and enrich the human condition and our collective intellect. The impossibility of this situation and its obscene proportions have not gone unnoticed. It is referred to and generally understood as the "knowledge explosion."

Most people ignore the phenomenon and get on with their daily lives because they realize it is quite beyond their power to do anything about it. Others, who are more deeply involved in the business of knowledge and have a more sophisticated understanding of individual power and the dangers of the situation, do much more wringing of hands and sigh quite often. Very few have been able or inclined to grapple with the problem so that no satisfactory solution seems in sight.⁵ The bitter irony is, of course, that society might not be able to recognize a solution if confronted with one — it could very well go unnoticed in the confusion. Just as easily, it could be "classified" to protect the public from itself or to give one national interest a supreme advantage over others or to preserve the idea until it could be packaged and marketed commercially for maximum profit.

national knowledge bases

Nevertheless, the industrialized world continues to take comfort in national knowledge bases. The quotation with which I chose to open the discussion is a good example of our belief, indeed our faith, in the indispensability of Canada's intellectual foundations. A significant measure of a country's future is to ask how well its knowledge base is working. In fact, it is the ultimate test of a country's capacity to create a viable future in the modern world.

Unfortunately there is no known index which one can adjust for seasonal variations and use to measure the knowledge base of a country such as Canada. Our sophistication with social indicators has yet to penetrate the realm of intellectual resources to provide a viable indicator of their capacity and future potential. Unsuitable measures such as counting the number of schools and their graduates, combined with blind faith in the application of their experience have seemed, too often, to suffice. Better alternatives, however, are rare.

politics and public education

Public education in Canada, including universities, is now dominated by political forces and politicians. Educational institutions have consequently lost any real measure of independent action in their intellectual contribution to society. Such dependence has always been the case in elementary and secondary education; it has been justified in the public interest and incorporated in our democratic institutions. Since World War II, the price of higher education in a variety of post secondary institutions has been the "Queen's shilling" to the inevitable point of domination. The university as societal critic, advisor, teacher and researcher is tolerated but its services are no longer guaranteed by independent status in society.⁶

At all levels the function of public education is the subject of negative public opinion and loss of confidence. Educators are so impotent politically and so busy gearing up to gear down in response to declining birth rates and consequent adjustments in funding that they have little success combatting their detractors. They have virtually no opportunities even to try without further risking their precarious public image. For verification, one need only consult a good daily newspaper and such regular autumn oracles on education as *Saturday Night* and *Maclean's*.⁷

Fortunately, some positive responses to this situation are evident. Organizations such as the Canadian Association of University Teachers (CAUT) and their provincial counterparts like the Ontario Con-

federation of University Faculty Associations (OCUFA) keep a watchful eye on government activities. The Fiscal Transfer Arrangements Act (presently extended two years to March 1977) governing the amount of Federal funds transferred to provinces for higher education's operating grants has far-reaching implications and is an active concern of the CAUT.⁸ In Ontario, OCUFA worries quite justifiably about coyly phrased political warnings that, "at this time," the Government does not plan to impose entrance examinations on provincial universities.⁹ There is encouraging evidence too that the Federal Government is beginning to take positive steps to reorganize the unsatisfactory basis of Canadian research. A Science Council of Canada Task Force organized in the summer of 1976 is studying the "erosion of the research manpower base" by investigating "science indicators, conversion factors and levels of funding" as well as "the supply and utilization of research manpower."¹⁰ In December 1976, the Government introduced a long-awaited bill in the House of Commons proposing extensive reorganization of the Canada Council, the Medical Research Council and the National Research Council.¹¹

For all this, however, it is impossible to ignore the recent OECD *Report's* view that "there is no coordinated educational policy at the higher federal decision-making level" and that "Federal-Provincial talks go on bilaterally and piecemeal, making it difficult to sort out what is a 'highly fractionated' education structure."¹² The prospect of a more useful arrangement being reached without a serious confrontation between higher educators and politicians seems very unlikely.

For example, *University Affairs* reported in December 1976 that the Council of Ministers of Education excludes bodies such as the Association of Universities and Colleges of Canada and the Canadian Association of University Teachers from financial deliberations with the Federal Government because they are not directly responsible to the public. The Council seems to have forgotten that it lacks direct public responsibility too.

Among the public schools, there is also considerable evidence that confrontation between politicians and educators is brewing. While teacher surpluses are accumulating annually across the country, the school age population declines steadily. In Quebec, the turmoil which resulted from the implications of Bill 22 would appear to have contributed significantly to the election of a separatist government. In Ontario and British Columbia, for example, Ministers of Education are moving swiftly to re-introduce core curricula to mollify public outcries about "the basics" and teachers meekly stand by, allowing public and political dictation of educational standards and practices. More accurately, provincial teachers' organizations are likely biding their time for the next round of salary negotiations. The future of pro-

vincial systems of education shows every indication of heightened confrontation wherein education *per se* is likely to suffer rather severely.¹³

In these respects, the knowledge base of Canadian society is severely weakened by the current reality of political domination and the heightened prospect of confrontation with politicians and a scared public. It is not mere coincidence that the Canadian Society for the Study of Education has chosen "The Politics of Canadian Education" as the theme of its 1977 yearbook. Perhaps an unexpected infusion of goodwill and common sense on all sides may save the day in the post-controls period, allowing Canada's educational system at all levels to contribute more positively than is possible now. Without such moderating influences, educators will find they are playing at Russian roulette with a fully loaded revolver; education will lose and so will Canada.

an informed public and the elitism of knowledge

Yet another measure of the knowledge base in society rests on the issue of whether or not an educated citizenry has regular access to information. Once educated, individuals become obsolete if they do not or cannot renew the substance of their education by regularly updating information and ideas, constantly testing the new against the old. One of the acts of faith associated with public education is that the process does produce individuals who are capable of continuing their own education once graduated from various phases of the formal process. Whether or not such faith is justified depends largely on the individuals' will to continue their involvement in self-education. Such initiative is quite beyond accurate estimation here, but there are facets to the life-long educative process which can be examined as measures of its viability. For it to work even reasonably well, individuals must have access to current information and critical analysis as well as some opportunity to utilize up-dated insights, as informed citizens. If such access and opportunity, either in employment or everyday life, are not present, then our faith in continuing self-education must be questioned.¹⁴

Perhaps the most genuine achievement of Canadian public education in the last two or three decades has been to provide the opportunity for more and more young people to be educated in the formal sense. Much has been accomplished by way of preparing a broadly educated citizenry to take on the task of continuing or continuous education. But it is now widely recognized that new graduates from all exit-levels of the formal education system have serious difficulty finding employment which makes suitable use of their preparation. A

good many find no employment at all and are often saddled with the paradoxical albatross of being overqualified for employment which is consequently closed to them.

My point in raising the issue here is not to make a hollow criticism that the relationship between the economy, employment, and education is so poor that we are squandering our young intellectual resources. My point is much more mundane. It is simply that the youth of this country have serious difficulty using their education through productive employment. This undoubtedly contributes to both political and educational disillusionment, which in turn serves to undermine the credibility of both enterprises.

The root of the danger is that there may be more illusion than reality in our achievements of educating more citizens. While sociological findings suggest upward mobility in Canadian society is still a very elitist process in which education is not necessarily the dominant prerequisite for success,¹⁵ the knowledge explosion supplies perhaps more serious evidence that a great deal of expensive and well-meaning educational change has resulted in no real change. Despite the recent revolutionary upheavals in curriculum, we are still uncertain that the process of public education supplies individuals with the right life skills and teaches them what is most worth knowing at a given stage in their lives. In this respect, the current "back to the basics" fetish displays elements of future shock. Apart from the common sense arguments in its favor, its popularity illustrates our inability to have confidence in more creative and imaginative avenues to education for individual development.

The achievements of equalizing educational opportunity may have raised the level of education in society generally but it is a myth that the process has significantly democratized the elitist managerial basis of Canadian society. It is also a myth that education guarantees upward mobility and the reward of a markedly better share of material comfort. Phrases such as "life-long learning" and "continuing education" suggest that educators recognize the process is on-going and ever-changing. But the fact remains that decision-making, policy development and all the positions which govern the direction society takes remains the preserve of a small and increasingly ignorant elite.¹⁶

It may be that the only valid argument which exists to support the purely intellectual side of public education is personal enrichment in ways that are not materialistic. That benefit, combined with the extensive socialization services which all levels of education provide, may be enough to justify its continued existence with generous public support. I suspect, however, that educators will have a difficult time convincing the general public that it is sufficient. This kind of public

incredulity is likely to become more intense because of its relationship to ramifications of the knowledge explosion. The loss of confidence in public education is related directly to the fragmentation of knowledge and proliferation of other agencies which generate new knowledge and rightly or wrongly often apply it more directly than educational institutions are in a position to do.

let them read books

Of course, all citizens have opportunities for continuing education. Apart from the thousands of formal and informal courses, the daily press, radio and television, there are always books. Canadians can always read to continue their individual intellectual growth and improve their capacity to contribute as knowledgeable people in a very troubled world. Yet even here, one encounters another discouraging set of situations which does anything but restore confidence in the knowledge base of Canadian society. Canadians in general do not read very extensively and, despite a decade of publicity and a good deal of pump priming, few improvements seem to have been made with the financial and nationalistic difficulties facing the publishing industry.

Almost immediately as one attempts to assess what actually is written and read in this country, it becomes apparent that available tools are inadequate for the task. *Canadian* comes closest to an accurate record of literacy production but has no qualitative guide and is too reliant on voluntary submissions to be more than 80% accurate. Of course, its bulk approach makes no attempt to gauge the impact of world literature on Canada's knowledge base. The quantity of product is undoubtedly there but its usability as a reliable guide to societal development is very questionable. Quickly one realizes that domestic concerns, while immediate, are subsidiary to international considerations. The only way to measure Canada's capacity to contribute intellectually and, in turn, comprehend the knowledge being produced elsewhere is to grasp the totality of the enterprise and the complex interrelationships between knowledge production, problem identification and solution capacity. Of course such a world information resource does not exist nor have we developed capacity to comprehend it even if we had access to it. To look on the domestic level is, nevertheless, revealing as a guide to how far we in Canada are from the ideal of contributing to the world's need for intellectual resources or to citizens' ability to maintain their education by reading.

The vast majority of Canada's policy literature is buried in government publications and the networks of periodicals where academic specialists talk to one another. For most Canadians, access to Fed-

eral Government publications has been reduced to a cumbersome mail order supply system. One must not only know the title and price but also the new address since the demise of Information Canada some months ago in the name of economy and responsible political behavior. Orders must be prepaid to the Department of Supply and Services, latest successor in the line retreating over several years to the Queen's Printer, or one faces delay and at least one exchange of correspondence. And, the last comprehensive catalogue of Federal Government publications which became available half way through 1976 contains no entries beyond 1973 imprints. The location of many Provincial Government publications presents equal difficulties but Ontario and Quebec at least provide better access through production of up to date catalogues.

Despite some improvements such as the appearance of the new journal, *Canadian Public Policy*, my observation regarding the literature of Canadian policy made in 1975 would still appear to be relevant:

Canadian policy-making is in a dangerously paradoxical position — somewhat like a man standing ankle-deep in the surf mustering up the courage to learn how to swim because he knows a tidal wave will soon engulf him in his tropical island paradise. The bitter irony is that a Canadian facing this predicament would likely be laid low by sunstroke rather than a torrent of water.¹⁷

It is worth noting, too, that there have been serious complaints recently regarding unnecessary government secrecy.¹⁸ While one realizes that important intellectual resources are contributed to government by researchers and thinkers located within and without the civil service, it is impossible to estimate their worth. There is good reason why some government research and internal government policy papers still in draft stages of development should be "classified." However, as critics have pointed out, there is a danger that classification is abused for political advantage by keeping the opposition and the public unnecessarily ignorant. Obviously, the longer a government allows a charge of unnecessary secrecy to go unanswered, the more serious is the damage to its credibility and the knowledge base of the country.

Another measure of the public's ability and opportunity to keep the nation's knowledge base virile through literary self-education may be found in the *Canadian Book Review Annual* which surveys trade books plus textbooks which "have an obvious trade appeal" to English-speaking Canadians.¹⁹ From the category of "Science and Technology" which consists of "Natural History," "Medicine," and "Military Science," it is cold comfort to learn that fourteen books were produced in 1975.

Among them one finds an illustrated book on wildlife, one on snow geese, an illustrated panorama on forests, one entitled *Wolves and Wilderness*, two guides to wild flowers, a trapper-naturalist's view of the Rockies and Morris Zaslow's history of the Geological Survey of Canada between 1842 and 1972. So much for "Natural History." "Medicine" is even more sparse: two histories, one of *Canada's Nursing Sisters*, the other of the *Toronto General Hospital, 1819-1965*, and for a grand total of three, a book called *Nurse* which is a "tribute to the Registered Nurses' Association of Ontario in celebration of its fiftieth anniversary." "Military Science" also has three books, one on *Canada's Fighting Ships*, another on *The Mackenzie-McNaughton Wartime Letters*, and finally, journalist Ernie Regehr's relatively more useful book entitled *Making A Killing: Canada's Arms Industry*. It at least reminds us that "Canada ranks sixth among the world's arms merchants."²⁰ Unhappily much less modest claims must suffice when it comes to Canada's intellectual merchandising.

Quantitatively one can argue that Canadians do much better in other trade publications. Our literary output is considerably better for example than that of our psychologists who have two books listed, one reporting on a six year research study of convicts who became mentally ill during their sentence and were cared for at a hospital in Clinton, New York, the other on *Psychic Mysteries of Canada*.²¹ Many other social sciences like political science, economics, urban and ethnic studies, for example, have a more impressive record. Overall, however, Canadian intellectuals are guilty of not doing as much as they could and undoubtedly should, to write on current themes for a general audience. Significant works in science and technology which are fundamental to learning to live with post industrialism, if anything is, seem singularly lacking.²²

toward a future of intelligent "post control" controls

My search for the knowledge base of Canadian society has relied on crude and arbitrarily chosen probes. As a result my conclusions must be read critically and cautiously. The analysis has been frustrating and when observations are negative it is always well to remember the prospects of the self-fulfilling prophecy, a danger which is ignored too often in the literature of futures forecasts.²³

The pride Canadians take in their educational achievements is often justified, but the knowledge base of our society has many flaws and, as a system, does not inspire full confidence. The lack of political leadership which the OECD examiners recently identified in educational matters and our lack of national policy are

both serious and well founded. In many instances, educators and the public must share the responsibility but it is doubtful if the general citizenry will be in a position to play a significant role in future public policy decisions. And, the nation's educators may not be in an appreciably better position.²⁴ The Fourth Estate will be the forum for public debate. It is also likely to be the most readily available source of information. The appropriateness of this forum is unquestioned, that it may be the only forum of significance is lamentable.

The assumption which the Government of Canada makes in the closing paragraphs of *The Way Ahead* relates to the document's subtitle, *A Framework For Discussion*:

Indeed, it is a basic assumption of this paper that Canadians — when presented with the information necessary to assess our future options and opportunities to discuss the directions in which we should be moving — will make their choices in a manner that is both responsible and in accordance with their long-term interest.²⁵

The “assumption” is both premature and presumptuous in our weakened state of producing and utilizing the “information necessary.” Unless steps are taken to strengthen and sustain the knowledge base of Canadian society, the dialogue proposed by the Government will be little more than a sharing of relative ignorance conducted in an echo chamber.

A much more thorough analysis of Canada's knowledge industry, particularly its production and consumption aspects, than has been presented here is needed. The premise on which to build such an investigation is the realization that knowledge is the one national activity which must be maintained in a position of growth if it is to remain useful to the society which supports it financially. Without such growth, the sustaining credibility, which Murray Ross has reminded us recently is so crucial to our educational efforts, will dissipate, signalling inevitable collapse.²⁶

Growth in this regard does not mean more schools for more students. It means finding ways and means for Canadians to enrich and renew their intellectual resources. To check “stagflation” and improve the growth of Canada's base of knowledge for intelligent participation in policy development and decision-making may require sacrifices in other sectors and services.

It is naive to anticipate that Canada will emerge from the present period of anti-inflation controls to a future devoid of restraints and restrictions. The issues are how much control is necessary and whether the restraints will be imposed intelligently by various levels of government with, or without, the voluntary participation and sup-

port of a knowledgeable population. It is equally naive to assume that the knowledge base of Canadian society is as well prepared as it should be to play a significant role in shaping the future.²⁷ But perhaps there is hope in the Federal Government's recognition that:

The concept of a new sharing of social and economic responsibility is fundamental to the search for new directions that will assure balanced growth without inflation.

The further elaboration of these new directions cannot and should not take place without a focused public dialogue. What is at issue is nothing less than the nature of Canada's social and economic future and the role that government will play in that future.²⁸

It is impossible for me to quarrel with either the strategy proposed or the Government's estimate of what is at stake for the future.

footnotes

1. *The Way Ahead: A Framework For Discussion*, Ottawa: Government of Canada, Oct. 1976, 32 pp. Available free, on request from the Department of Finance, Ottawa, K1A 0G5.
2. *Ibid.*, pp. 14 and 15.
3. Kimon Valaskakis, Peter S. Sindell and J. Graham Smith, *The Selective Conservator Society* — Vol. I, *The Integrating Report*, Montreal: GAMMA, Université de Montréal/McGill University, July, 1976, p. 4.
4. See, *Year-Book of World Problems and Human Potential*, Brussels: Union of International Associations/Mankind 2000, 1976 for an interesting expression of this capacity based on a "process of on-going contact with the network of 3300 active international associations and agencies" represented in the volume. In Canada the work is available from the Union of International Associations, Box 40, Victoria Station, Montreal, Quebec, H3Z 2V4.
5. See, Michael Marien, *Societal Directions and Alternatives: A Critical Guide to the Literature*, Lafayette, N.Y.: Information For Policy Design, 1976; Michael Marien, "The Banners of Babel" in Andrew A. Spekke (ed.), *The Next 25 Years: Crisis and Opportunity*, Washington: World Future Society, 1975, pp. 191-194; Alvin Toffler (ed.), *Learning For Tomorrow: The Role of the Future in Education*, New York: Random House, 1974, particularly Part II on disciplines; Robert Bundy (ed.), *Images of the Future: The Twenty-First Century and Beyond*, Buffalo: Prometheus Books, 1976, regarding public images and policy development; and Fritz Machlup, *The Production and Distribution of Knowledge in the United States*, Princeton, N.J.: Princeton University Press, 1962, for a pioneer study in a less complicated era.
6. See, Desmond Morton, "Canadian Universities and Colleges: After the Power Trip, Priorities" and other articles forthcoming in Hugh A. Stevenson and J. Donald Wilson (eds.), *Precepts, Policy and Process: Perspectives on Contemporary Canadian Education*, London, Ontario: Alexander, Blake Associates, Spring 1977.

7. See, Philip Marchand and Barbara Amiel, "The Ignorant Canadians," *Saturday Night*, Vol. 91, No. 7 (Oct. 1976), pp. 17-30 and "Are Canadians Getting Their 112 Billion Worth?" *Maclean's*, Vol. 89, No. 15 (Sept. 6, 1976), pp. 59-62.
8. I. Cinman, "Greater Consultation on Higher Education Matters Urged Between the Provinces and Ottawa," *CAUT Bulletin*, Vol. 24, No. 8 (Oct. 1976), pp. 1 and 4.
9. "Exam Possibility Worries OCUFA," *Western News*, Vol. 12, No. 40 (London, Dec. 2, 1976), p. 1 and Hank Daniszewski, "Faculty Group Says Kept in Dark," *The Gazette*, Vol. 84, No. 25 (London, Dec. 3, 1976), p. 1.
10. "Task Force to Study Research," *Western News*, Vol. 12, No. 38 (London, Nov. 18, 1976), p. 4.
11. "Bill Calls for Reorganization of Federal Granting Councils," *The Globe and Mail*, (Toronto, Dec. 3, 1976), p. 9 and "Ottawa Plans to Transfer NRC's Patent Arms," *Ibid.*, p. 4.
12. Cinman, *op. cit.*, p. 1 and Organization For Economic Cooperation and Development, *Reviews of National Policies For Education: Canada*, Paris: OECD, 1976, Chapter VII. See also: Jeffrey Holmes, "The Evitable Eighties: A Series of Articles on Higher Education and the Problems Ahead for Universities," *University News Reprint*, Halifax: Dalhousie University, May 1976.
13. "Confrontation is Loser's Game?: Wells," *Ontario Education Dimensions*, Vol. 10, No. 5 (May/June 1976), p. 4; "Core Curriculum: What the Minister Said," *Ibid.*, Vol. 10, No. 7 (Dec. 1976), pp. 6-7; "New School Guidelines Approved By Teachers," *The Globe and Mail*, (Toronto, Nov. 15, 1976), p. 5 and "Minister's Policy Statement — Core Curriculum Booklet Sets Goals; Core Itself, Assessment to Follow," *Education Today*, Vol. 3, No. 3 (Department of Education, Victoria, B.C., November 1976), p. 4.
14. Some aspects of this section of the article are drawn from Hugh A. Stevenson, "Public Education: Choices For The Future," the keynote address delivered at the Annual Conference of the Ontario Association of Education Administrative Officials, London, Ontario, October 28, 1976.
15. For an up-date on John Porter's classic work in *The Vertical Mosaic* (1965) see: Wallace Clement, *The Canadian Corporate Elite: An Analysis of Economic Power*, Toronto: McClelland and Stewart, 1975.
16. Michael Marien, "The Discovery and Decline of the Ignorant Society, 1965-1985" in Thomas Green (ed.), *Educational Planning in Perspective*, Guildford, Surrey: IPC Business Press, 1971, pp. 80-89.
17. General comments here are based to some degree on Hugh A. Stevenson, *Canadian Policy Issues, Ideas, and Alternatives: A Select, Annotated Guide to Current Literature*, World Institute Council, Canadian Literature Project, 1975, unpublished typescript, p. xix.
18. For example see, Hugh Winsor, "Trying to Pierce Ottawa's Screen of Confidentiality," *The Globe and Mail*, (Toronto, Nov. 22, 1976), p. 1-2 and "Cabinet's Secrecy Habits Die Hard," *Ibid.*, (Toronto, Nov. 23, 1976), p. 9.
19. Dean Tudor, Nancy Tudor and Linda Biesenthal (eds.), *Canadian Book Review Annual 1975*, Toronto: Peter Martin Associates, 1976, p. vii. A similar source for French-language trade publications has been the

Livres et Auteurs Québécois: revue critique de l'année littéraire published by Laval University Press since 1967.

20. Tudor, *op. cit.*, pp. 265-270.
21. *Ibid.*, pp. 263-264.
22. The depth of this problem is explored more fully in Philip Ritterbush, "Public Understanding of Science and Technology: A Social Problem," *Social Innovation*, No. 2 (Washington, June 1976), 68 pp. A similar complaint in relation to bilingualism, multiculturalism and national survival is discussed briefly in T. Barr Greenfield, "Bilingualism, Multiculturalism and the Crisis of Purpose in Canadian Culture," *Canadian Society for the Study of Education Yearbook*, Vol. 3 (1976), pp. 107-109.
23. See, Richard L. Henshel, *On the Future of Social Prediction*, Indianapolis: Bobbs-Merrill, 1976, 77 pp.
24. For a recent discussion see, Tom Williams, "Leaders or Lemmings?" *Education Canada*, Vol. 16, No. 2 (Summer 1976), pp. 28-35.
25. *The Way Ahead*, p. 32.
26. Murray G. Ross, *The University: The Anatomy of Academe*, Toronto: McGraw-Hill, 1976, pp. 276-279.
27. For example, note the emphasis which the Conserver Society Project places on the relationship between civic education and responsible citizenship. It is not a dominant theme or even the subject of one of their specialized studies, yet it is very evident that such a relationship is essential to adoption of anything like their proposals. See: Paris Arnopoulos, "Political Aspects of the Conserver Society," *The Institutional Dimension*, Vol. 3, Study No. 11, Montreal: GAMMA, 1976; recommendation 10 on p. iii advocates that the federal government, in cooperation with the provinces, institute "permanent civic education." More extensive consideration of the role of education would have been useful, particularly in such essays as Peter S. Sindell, "Cultural Dimensions of a Conserver Society in Canada," *Ibid.*, Vol. 4, Study No. 13.
28. *The Way Ahead*, p. 32.