

It should not be forgotten either that the taxonomy has been criticised by Guilford. Four of the six of Bloom's cognitive processes fall within the cognitive domain of Guilford, which has twenty four cells. Bloom's 'synthesis' appears to be related to 'productive thinking operations' in Guilford's terminology, whilst 'evaluation' would be an operation category within the Structure of Intellect Model. To Guilford, Bloom's concepts carry redundancy, or, Bloom is a "lumper", and to Bloom, Guilford is a "splitter". This apart, the taxonomy has provided a classification of some common educational objectives about which teachers can now communicate more effectively as a result of clear identification. The attempted validation has raised important problems for test constructors. It has revealed some interesting deficiencies in their modes of functioning. But at best, the taxonomy can only be regarded as a halfway stage to the specification of behavioural objectives which can also be expressed in terms of other functional and verified psychological concepts and dimensions.

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Social Trends and Educational Planning**

The only way that we in education can reduce some of the fears we have about what the future holds for us is to examine where it is we appear to be going. There is a need for some tentative answers to questions paralleling those put recently by the economist William Peterson: for example, what will be the future public demand for education at various ages and levels? What kinds of subjects and new learning technologies should be under development to get ready for the future? How large and how skilled does the teacher and teacher aide force have to be? What kind and how much physical plant capacity shall be required to meet the probable social needs of the future? These are fairly obvious questions but their answers may not be all that obvious because they arise out of some broader questions like what are the directions and growth rate of the economy in the future? Or, what will be the socio-political structure of values and institutions under which education will operate?

If consideration is given to the Canadian case, although Canadian society has essentially taken shape in an evolutionary way — evolutionary in that it has come to its present state of affairs as a modern complex

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industrialized society from a far simpler rural and colonial heritage without catastrophic political upheaval — it still remains that Canada has undergone three important near-revolutions. The first of these sweeping social changes is widely recognized: The Industrial Revolution came here and the life-style experienced today is in large measure attributable to that. But it is not solely attributable to that, and this downplaying and overlooking of nontechnological factors is one of the major deficiencies in Canadian education. Not nearly enough is said about the Organizational Revolution of the past 75 years which has accompanied this enormous industrial expansion, an expansion which clearly would not have been possible without these organizational innovations. Complex, bureaucratic work organizations — be they business, industry, or government — are relatively rational and efficient and get the complex tasks of our society accomplished in a reasonably effective manner. Organizations as well as machines also have their direct and immediate consequences for people's lives. Most of labour force work in organizations now and even more of us are going to work in large organizations in the future. Yet how much is this taken into account during the formal educational process? To what extent are people "prepared" to work in these efficient but restrictive organizations, or to consider changing them to make them more effective?

One of the reasons that seems to contribute to avoiding such realities stems from the third of the near-revolutions which must be mentioned in this context: the Social Revolution. Over the last 150 years, Canadian life has been undergoing a fairly rapid democratization and ever-rising social expectations. While no reasonable person would argue that it is as yet a truly democratic society, increasing importance is placed upon the quality of human life and many support values which hold that everyone in Canada has a right to enjoy the benefits of the so-called free society. But a lot of this talk has been put in terms of unbridled competition and rugged individualism. While some of this may have aided the process of nation-building, the over-emphasis upon the benefits of competition and individualism have led to a lack of social responsibility. Schools and universities teach false expectations about what are the actual circumstances of many citizens. For example, in the world of work, the message about real organizational life is not able to get through: the need for teamwork, cooperation (or at the very least, accommodation), and the need for coordination of effort, not because these are inherently right but, rather, because they may pay social as well as economic dividends for the many. Apparently these sorts of things are not talked about very much. Organizational considerations and social values such as these are essential parameters in any meaningful educational planning.

The People

If there has been a failure in Canadian education to examine everyday life in a comprehensive way and with complete frankness, questions that

must be asked are: What are we now as a people? Where do we appear to be going? And what can education do in adjusting to these social realities? Canada is a nation of 22 million people but in just a decade the population will be over 25 million and the largest increase will occur in the age group between 15 and 34 years of age. Although there may be pride in both our rural past and our agricultural present — the fact of the matter is that Canada is increasingly urbanized and a majority of the population live in towns and cities; this urbanization has been hastened by the mechanization and reorganization of agriculture along with the greater economic opportunities in the cities. By the year 1980, eight out of ten Canadians will be living in cities, and six out of ten Canadians will be living in 29 large metropolitan areas. Yet it is not always apparent that the kinds of things learned in school reflect this rapid trend toward urban living; rural romanticism dies hard. In addition, while much of Canadian population growth stems from natural increase, a sizeable portion comes from immigration. As long as there is a failure to provide suitable numbers of technically trained manpower, the nation likely will continue a policy of encouraging immigration to meet these skills requirements. In this context of population factors, furthermore, are children being educated to question the optimum size of cities and consider the possible consequences of unlimited population growth?

The Economy

As far as the economy is concerned, during the coming decade the labour force will probably increase by about one-fourth; but of this increase almost two-thirds of the increase will have been made up by women. To what extent are these trends being anticipated at school? To what extent is attention given the kinds of service and clerical jobs that most of these women will surely be holding? Accompanying this growth, Canada will likely continue to experience economic ups and downs during the coming decade. To what extent are these real facts of economic life analyzed at school? Nationally, the unemployment rate will probably vacillate somewhere between a high of 8% and a low of 3% suggesting an average unemployment figure somewhere in the 5 to 6% range over this period. Are students prepared for the possibility that unless things are markedly changed some people will be unable to find work to their liking or that they may be exposed to periods of unemployment? Are students aware that most typically in the next generation people will change occupations several times in a lifetime?

As far as the mix of occupations is concerned, there will be a further expansion in most of the white-collar occupations and in particular clerical occupations because paper-pushers are endlessly assimilable in large-scale, complex organizations. The skilled and semi-skilled blue-collar occupations will remain relatively constant. There will be some slight decline in unskilled labour; and there will be a continuing decline in agricultural occupations. Something which may compensate in some ways for possible automation inroads on the blue-collar and parts of the

white-collar world is that Canadians have an almost insatiable taste for services. (There is virtually no limit to the varieties of services that can be invented which people come to feel that they really need).

Despite these occupational realities, educational institutions still over-emphasize the blessings to be gained from professional occupations. Even though the professions are increasing slowly, there are not going to be as many opportunities as has been contended. They have been overrated and overpromoted. Surely a more reasonable course of action would place more emphasis on the real possibilities for the future which lie in expanding technician and technology occupations, in clerical occupations; this could counter the high-status, white-collar bias that appears to infuse our school system and the larger society. There are other avenues to a useful and rewarding life. Moreover, with about one-third the Canadian labour force constituted of women (and every likelihood that this fraction will increase), are female students told that women are more prevalent in inferior occupations and positions — inferior as to rewards, whatever they may be? There is little evidence to suggest any but modest change in this social circumstance.

One of the more troubling aspects about Canada's economic future, however, lies in the prediction that although the economy will grow and the standard of living will increase, it is highly unlikely that there will be substantial change in the distribution of the family income in our country. (Consider what happened to the Carter Commission Report and the Benson White Paper on taxation and the ultimate political outcome; the 1971 tax revisions.) Any substitution of social equity values for current ideas about economic fitness is most improbable in the foreseeable future. Have young people been made aware of the fact that there is a considerable income spread in Canada? Could not students consider alternative approaches to this persistent problem?

Another aspect of the real economic world in Canada has to do with the declining value placed on saving such that it is possible for people to enjoy things now and to pay for them later. Any school system that fails to take into its curriculum the matter of credit buying is overlooking a major economic pattern of most people. Finally, in this sphere, despite what was said earlier about the unlikelihood that government would intervene in this coming decade in any massive way on the matter of income redistribution, there will be a need to anticipate an increasing amount of government surveillance and planning in the economic sector because Canada's is a mixed economy with an ever greater interpenetration of business, industry and government (Galbraith, 1967). Business and industry are just as dependent upon government as the public at large. It would be more constructive if the loose talk about a "free enterprise" system in Canada were tempered by educational straight-talk about the nation's mixed economy.

Stratification Institutions

Related to the aforementioned persistent economic differences, and frequently interrelated ethnic and linguistic differences, is the question of socioeconomic class. While not nearly as rigid in Canada as the class system of Britain, for example, socioeconomic class does influence and will likely continue to influence everyday lives. With the detailed investigations of social scientists like John Porter (1965) at hand, courage is being developed to acknowledge this aspect of Canadian life. But recognition of something does not automatically lead to its eradication. Surely this is a topic that could benefit from educational treatment before the university years, to teach people to be aware of these inequalities (whether in the workplace or in the legal system) which have their deep consequences for all quarters of society. Although there are indications that the younger generation is less enchanted with some Canadian prestige and status trappings, there is little reason to anticipate substantial diminution of university attendance as a primary agency of status conferral (Pineo and Porter, 1967; Porter, 1965).

Or to take other examples of class behaviour in Canada, what is taught about the fact that women are rather consistently discriminated against in employment; or that Canadian Indians virtually constitute a social caste; or that there is more than one level of legal service available, depending on one's social circumstances; or about the informal "collaboration" between city governments and real estate developers which tends to perpetuate patterns of residential segregation and in the process reinforces the socioeconomic class system? There is little to show that these stratification patterns are disappearing very rapidly and they will persist as long as it is pretended they are not there.

Major social trends have profound implications for educational planning — whether it be for curriculum, organization or personnel. Moreover, because these trends in Canadian life have implications for all levels of education it is quite unrealistic to restrict elementary (or junior or senior high) schools to considering only those trends that the timid and the hidebound contend are suitable for that level. Finally, the question must be asked if current public education is in some ways seriously imbalanced by its under-emphasis of certain social institutions and its overemphasis of others. If this is the case, as it would appear to be, it is fitting and essential that public education examine systematically the interplay of social trends and plan to say something about all major institutions if the whole person is to be educated. And if this were to happen in education it could serve as a corrective to current preoccupations with abstract educational philosophy (oft-times sheer ideology), teaching methods and instructional hardware — and other elements in current educational practice which so conveniently permit the avoidance of important substantive issues in everyday life.