

# Education and the Economy in Newfoundland

James Overton

Volume 18, numéro 2, fall 2002

The New Early Modern Newfoundland: Part One

URI : [https://id.erudit.org/iderudit/nflds18\\_2re01](https://id.erudit.org/iderudit/nflds18_2re01)

[Aller au sommaire du numéro](#)

Éditeur(s)

Faculty of Arts, Memorial University

ISSN

1198-8614 (imprimé)

1715-1430 (numérique)

[Découvrir la revue](#)

Citer ce compte rendu

Overton, J. (2002). Compte rendu de [Education and the Economy in Newfoundland]. *Newfoundland Studies*, 18(2), 304–315.

## REVIEW ESSAY

# Education and the Economy in Newfoundland

*Schooling in a Fishing Society: Education and Economic Conditions in Newfoundland and Labrador 1836-1986.* Phillip McCann. St. John's, ISER, Memorial University, 2 vols., iii, 277p. + xl, 329p, softcover, \$14.50, \$18.50 (v. 2), 1994. ISSN 0840-9927.

JAMES OVERTON

WE ARE SURROUNDED by claims concerning the powers of education in relation to economic and social affairs. This is not a new phenomenon. In the nineteenth century, campaigners for the establishment of national education systems and free compulsory education promoted education as a means for dealing with a variety of problems, including pauperism, crime, and militant trade unionism. In Britain, education was promoted by James Kay Shuttleworth as a way of "stamping out the fires of rebellion" (45). Such great claims have continued to the present day. During the crisis of the 1930s, the British-appointed Commissioner Sir John Hope Simpson argued that the key to solving Newfoundland's problems lay in improving "morale" by promoting, among other things, "true religion and ... education" (13). In the second half of the 1960s, J.R. Smallwood, following John Kenneth Galbraith's observation that underdevelopment could be dealt with by a "massive infusion of education" (Gwyn 292), argued that the province's social and economic transfor-

mation depended on a revolution which would make high quality education available to, if not all Newfoundlanders, then many more than in the past. Later, Memorial University's president Leslie Harris identified education as the "gateway to the future," the key to creating the "the kind of future we would want for our province" (23). Similar claims have more recently been repeated by Doug House, the former head of Clyde Wells's now-defunct Economic Recovery Commission, and by the philosopher John Scott, who has argued that "education is the key" to Newfoundland's development.

Such assumptions are also inherent in the indictments of those who keep telling us that schools have failed. For example, as Michael Valpy tells us, schools are "blamed for our children's inability to control their aggression, for their rudeness, their resentment of authority, their lack of values, their sexual orientation and behaviour, their widespread alienation, and their failure to become responsible, committed and productive citizens upon graduation" (42). Implicit in such statements is the assumption that education can (and should) be able to deal with a wide variety of societal problems by producing model citizens.

The study of the history of education involves looking at the history of what people and societies think they are doing when they educate. It is about what arguments are used to justify what is done in the name of "education," and what results are expected. It is also about the reality of actual outcomes. But here there are major problems. How do we investigate and measure the impact of education? An awareness of the difficulty of this task emerges from Phillip McCann's work.

The two-volume publication under review is the result of a major project headed by McCann, a former Education professor (professor emeritus since 1989) at Memorial University. The study provides a database of all the quantifiable aspects of education in Newfoundland and Labrador from 1836 to 1986. This is not just a collection of tables containing educational and economic statistics, nor a mere chronicle of events. McCann goes beyond the difficult and praiseworthy job of compilation, and uses available data to examine "the interaction between the educational system and changing economic conditions, particularly in the fishery" (1: 1). The statistical data is presented in Volume 2 in 193 tables which "underpin" (2: ii) the analysis found in Volume 1.

Informed by the data, McCann provides a broad-ranging analysis of patterns of educational provision and development, together with an attempt to identify the factors which shaped these patterns. The analysis also contains a significant comparative component, which allows educational developments in Newfoundland to be evaluated in terms of what was happening elsewhere. The discussion is organized into periods: 1836-1856, 1861-1916, 1921-1946, and 1951-1986. There is considerable unevenness in the coverage, however, and the period of 1861-1916 receives the most attention. The second half of the 1940s is neglected, as is the First World War. Likewise, the period after Confederation is given only limited atten-

tion, perhaps understandably, since this period has most often been examined by other researchers.

At least from the time of William Petty's "Political Arithmetic," published in 1690, there has been an interest in collecting statistics on population, education, health, employment and so on (Shaw and Miles 1979). Such statistics have been regarded as indicators of the health of society, a means by which those who govern could put their fingers on the pulse of society, assess conditions, and perhaps adjust their actions appropriately. The state needed detailed knowledge in order to repair national deficiencies. Jeremy Bentham, writing in the early nineteenth century, argued that data furnished by the courts could provide "a kind of political barometer" which would indicate the "moral health of the country" (Gatrell, Lenman and Parker 3-4). Statistics were also used to demonstrate the need for social reform, and by the time the Statistical Society of London (later Royal Statistical Society) was formed in 1834, the idea that the public had "a right to receive every kind of information which can lead to a correct judgement" of a government's actions already existed (Macfarland 33). It became widely accepted that statistical information provided an adequate guide to social performance. What Tooze calls "the rolling barrage of statistical data" has now become a "key part of the narrative of nation that is consumed daily" (Tooze 214).

Most people in western industrial societies assume that statistics provide solid facts about the world in which we live. Too many treat them "simply as a mirror of reality," and in so doing underestimate "what is in fact involved in their production" (Tooze 214). Statistics, it is thought, unproblematically tell us the number of unemployed people, the number of existing schools, and the levels of educational attainment in a given population. But does a rising crime rate indicate that more crime is being committed? Does the unemployment rate provide an accurate indicator of the extent of unemployment? In order to use statistics wisely, as much as possible must be known about their origin. The process by which abstract conceptions are turned into supposedly objective reality must be examined (Tooze 214). This involves understanding their production, how and why they were compiled, what categories and definitions were used by those collecting and recording data, and even what instructions were given to the compilers of these statistics.

The gathering of data which might be used to gauge social and economic conditions was poorly developed until a century or so ago. In Newfoundland this remained the case well into the twentieth century. Nevertheless, as McCann shows, statistics relating to education and to the economy do exist.<sup>1</sup> Assembling and using statistics which were collected for a variety of purposes over a long period of time is, however, a challenging task. The value of any statistics depends on a clear understanding of how these statistics were compiled. Without this it may be difficult to understand what the data means, much less assess its accuracy and usefulness. McCann understands this problem and goes to great lengths in his notes to provide contextualization for this data.

In compiling the 193 tables which comprise Volume 2 of *Schooling in a Fishing Society*, McCann made many “operational decisions.” This is an inevitable part of research. It is important to make the reader aware of what these decisions are, why and how they were made, and how they might affect the data with which the researcher has to work. McCann treats this issue with care. He makes it clear that even what was meant by the terms “school” and “pupil” is not obvious in a historical context. Nor can we proceed without defining such a basic term as “education.” We must not assume that our present-day definitions, categories, and ideas can simply be imposed on the past. How was “attendance” calculated? What is the difference between enrolment and attendance? These become important questions when measuring the extent of schooling and where — as was often the case — schools only operated for a few months of the year.

Today, “school age” is clearly defined. But how recent is this? Even if there was, for example, in the late nineteenth century, a generally accepted notion that children “ought” to attend school between the ages of five and fifteen, what was the actual practice in Newfoundland and how did this differ from other countries such as Canada or Ireland? Add to this the reality that the historical record is incomplete, that age categories in the census are not consistent, that changes in record-keeping make it impossible to identify schools by community from 1920 to 1934, and that the practice of recording pupil achievement on a regular basis was discontinued in 1920, and what might appear to be a relatively straightforward task becomes a difficult one.

McCann’s work lists the number of schools and teachers, and the number of pupils categorized by gender, age and religious denomination. These figures are provided for seven regions, and give a picture of geographical variations over time. It lists also the subjects taught, as well as the teachers’ salary and qualifications. It provides school attendance and pupils’ academic achievements. It also provides the funding of schools and basic information about economic conditions (e.g., fish prices). This is done in order to explore the relationship between the country’s economy and education. However, here it is important to recognize that what is now regarded as key economic measures/indicators have recent origins. For much of Newfoundland’s history there are no figures for gross national product, living standards, average wages, or unemployment. This, of course, poses a problem for those who seek to explore the relationship between education and economic and social conditions.

This is a study of how money for education was allocated and how it was spent. As such, it provides a basis for assessing the effects of operating a Christian denominational education system. It is McCann’s argument that “the strength of the [denominational] system to a large extent mirrored the weakness of the state, insofar as the latter was unwilling to undertake the direction and planning of education and many of the other functions normally undertaken by a secular bureaucracy” (82). The state provided money to major religious denominations, whose superinten-

dents had the power to direct how this money was spent. They decided how much was spent on constructing and maintaining schools, how much on the purchase of equipment, and how much teachers would be paid. McCann's information provides the basis for a detailed examination of the expansion of education, the working conditions of teachers, school attendance, and denominational spending priorities.

This is not a simple story of gradual improvement, the kind often found in standard historical accounts of education. It is, rather, a much more complex account of reversals and advances, and of inequalities along regional, religious and class lines.

The major denominations became the owners and managers of educational empires, and McCann's work helps us consider the effects of the denominational system on patterns of educational provision. Overall, it may be that the "drain in dollars" caused by the duplication which was a result of the denominational system would not have been sufficient to provide the funds to "enable the state to give a school place to every child in the age-group 5-15" in the nineteenth or early twentieth centuries (McCann 91). Nor would it have allowed the standard of schools to be raised to mainland standards. However, if the funds had been spent on books and equipment, it would have "greatly improved the quality of education" (McCann 91).

It is also worth thinking about the effects of the denominational system on patterns of educational provision, particularly during the latter part of the nineteenth century when Newfoundland's pattern of settlement began to change. The expansion of education did not take place in an orderly and planned fashion. Population movements into new areas of settlement were still occurring throughout the period. The number of schools on the west coast expanded by 970 percent from 1876 to 1916 (McCann 53). In all areas the expansion of schools was greater than the expansion of the population, in some areas many times greater.

Since denominational superintendents controlled the expenditure of their grants, interesting questions are raised about the relationship between school building and the creation and expansion of denominational empires. It is reasonable to assume that the provision of educational facilities would be a key factor in maintaining or expanding church membership. For example, the Roman Catholic board spent proportionately about twice as much on the building and repair of schools as did the Protestant board in the 1860s and early 1870s (15.4 percent compared to seven percent); and in the second half of the 1870s, while one group of Protestants, the Methodists were spending twice as much as the Catholics, just over 40 percent of their funds on school building.

Over time, denominational competition led to increased duplication. As new denominations were recognized, the problem intensified — for example, with the emergence of the Salvation Army. By 1916 about one-seventh of the communities with schools had duplication (McCann 90). School building possibly took place at the expense of the quality of education, since those in charge expanded provision into new areas, rather than improving the quality of education in existing facilities.

Little was spent on school equipment, with Catholics spending the lowest. There was not a simple trade-off between the quantity and quality of educational provision, but the measurement of quality is problematic — and for the past we are at the mercy of whatever statistics happen to have been collected and survived. In addition to this, there is the problem of interpreting these statistics, and assessing their usefulness and validity for answering questions about the quality of education. The problem of quality is made more difficult because it involves changing judgements about what are considered to be the aims of education, and thus the content of the curriculum. Even if standards increase substantially for some students, how do we weigh that against a much more modest increase for the vast majority of students? Standards in mathematics may be increased by devoting more resources to teaching in this area, but how can this be weighed against the neglect of history, geography, science, art, and music?

Two measures of the quality of education are the qualifications of teachers and the number of subjects taught. Newfoundland teachers were poorly qualified and poorly paid (the two were clearly related) compared with their Canadian colleagues; the pay scale was far below that of the poorest Canadian province (McCann 68). This pattern persisted into the 1950s. But even here the story is complex. There were substantial denominational variations in the quality of teachers, and the situation of teachers did not always improve over time. The late-nineteenth-century expansion of school building was accompanied by a decrease in the proportion of grant money allocated by the denominations to teachers' salaries (McCann 54). Thus, while the number of schools increased by 90 percent between 1871 and 1891, expenditure on salaries fell by over 80 percent (McCann 55). Average teachers' salaries actually fell significantly from the early 1870s, and did not recover until after 1900 (McCann 56). This was an obvious formula for deterioration in the quality of education (McCann 55). Yet at the same time, educational leaders pressed the government to increase funding, arguing that better teacher training, more skilled teachers and curricular improvements were the keys to a better educational system. Not surprisingly, a rapid turnover of teachers and lower teaching standards were identified as problems. In any study it is important to look not only at what people say, but at what they actually do (the two are often contradictory). McCann's statistics help in assessing the rhetoric of those responsible for administering education in light of their actions.

A significant decline in reading, writing, and arithmetic was recorded following the abandonment of the informal classification of achievement in the 3Rs, and the introduction of "Standards" based on the system used in English elementary schools (McCann 121). But this "decline" was "almost certainly due to the more rigorously-defined levels of reading achievement set out in the Act of 1876 and their application by teachers under the new regime of the powerful Superintendents" (McCann 122). A new system of measurement for educational achievement can give the impression that standards are falling, in the same way that changes in

police record-keeping procedures can lead to changes in recorded levels of crime, which give the impression that crime is on the increase (Leyton, O'Grady and Overton 2000). In McCann's discussion of standards, there are important warnings for those who complain about falling standards in the present.

Discussions about the quality of education are revealing, since they tell us a great deal about peoples' assumptions and expectations. But a study of the curriculum also tells us something about the intended functions of education. A curriculum intended to create a well-rounded, informed, critically-thinking population looks different from one intended to establish and maintain control over the hearts and minds of the population by a particular religious denomination, or from one intended simply to prepare students to be manual workers.

At a time when governments and some educators are promoting a greater emphasis on a "back to basics" approach to education — focusing on reading, writing and math — it is worth noting that one of the measures of quality discussed by McCann is the number of subjects in the curriculum: "there is a point at which the width of the curriculum becomes one of the benchmarks of the caliber of schooling" (McCann 141). He is able to document the gradual broadening of the curriculum from a narrow base in the 1860s to a situation in the 1890s where one in four pupils were taking Geography, and one in five, History. The curriculum is an indicator of changing societal values. By 1911 Hygiene was a school subject, and 40 percent of Church of England pupils were studying drawing and composition. But again the story is not a simple one of gradual and inevitable improvement. Just as there were advances and retreats in the provision and quality of education over time, and huge geographical variations, there were significant differences between the denominations in the kind of education provided. Access to education, and the kind of education which one received depended on the lottery of birth, social class, and denomination. The provision of education was not based on principles of equality of access and opportunity.

One of the strengths of McCann's study is its comparison of what was happening in Newfoundland with that in Ireland and Canada. This helps us determine the extent to which patterns of education in Newfoundland were exceptional. In terms of the qualifications of teachers, Newfoundland fared poorly compared with Ireland and Canada. Ireland had two or three times the number of the highest grade teachers, and Newfoundland was consistently well behind all Canadian provinces. In terms of curriculum, Newfoundland might not have been very different from Ireland in the late nineteenth century, but the provinces of Ontario, New Brunswick and Manitoba had a "lively and well-subscribed academic curriculum" which was "far beyond that operating in Newfoundland" (McCann 146). In 1876 Newfoundland had six subjects in its curriculum; New Brunswick had 18, including chemistry and natural philosophy.

At the start of the twentieth century, only a little over half of the school-age population aged 5-15 received some form of education (McCann 139). Under five



percent of those aged 15-20 were attending educational institutions. Of the 5-15 age category, approximately 45 percent of the students attended public elementary schools. The educational system was "limited and largely academic [and] entirely lacking in the sciences" (McCann 148). Even then, the "quality and extent" of education was "skewed towards the relatively prosperous and urbanized Avalon-Conception Bay area, a species of internal colonialism under which the outport regions suffered a double deprivation ... [t]he effects of [which] were ... to be felt in the cultural and educational spheres until the end of the twentieth century" (McCann 149).

One of the main themes to emerge from McCann's work is that educational provision in Newfoundland has been characterized by a variety of inequalities. For example, if most people had access to education, it was a basic form of education. Nevertheless, there was a system of secondary education which consisted of a small number of colleges located in St. John's. These denominational colleges provided education for teachers. They charged fees averaging \$8-9 a year, which must have put them beyond the means of most fishing families during the 1880s and 1890s, when the average per capita income was estimated to be \$75 a year (McCann 164). These colleges were relatively well funded, as they were allocated, typically, between one-fifth and one-third of the total government expenditure on education in the late nineteenth and early twentieth centuries. However, they provided for only a small number of students — about one percent of the 5-15 age group (McCann 179). This fact leads McCann to comment that "in effect, the education of the masses was being sacrificed to that of the elite, which had close ties with the colleges" (179). This resulted in a high-quality education with a relatively wide range of available subjects, even if science was neglected in the Catholic and Church of England colleges compared to the Methodist College, where it had a significant presence in the curriculum. Overall, this was state-subsidized education for the political-business elite, the relatively tightly knit group of conservative and self-interested individuals which ruled the country.

Overall, the Newfoundland economy, measured in terms of growth rates, did not fare too badly compared with Maritime Canada in the first half of the twentieth century, but goods production in Newfoundland remained far behind Canada in this period. There was a period of relatively rapid growth after 1910, achieved by a major expansion in new resource industries exploiting forests and minerals. However, there was a significant contraction in the fishing industry in the first four decades of the twentieth century, even if, in terms of number of people depending on it for a livelihood, fishing remained preeminent. Problems in the fishing industry undermined the advances being made in other sectors of the economy. Again, in the 1920s there was a drive to industrial development which attempted to compensate for the decline in fishing. It did so only partially.

The period following 1918 was one of quickening interest in education and social reform. The vote came to women. A non-denominational university college

was established and a pattern of establishing non-denominational schools in the new mill and mining towns was continued. Innovation in the administration of education was undertaken, but overall the 1920s was a decade of relative stagnation in public schooling. Any minor advances which were made in this period were undermined in the early part of the Great Depression which saw “a sudden and disastrous decline in all aspects of education” (McCann 184).

The economic crisis of the early 1930s devastated the fishing industry. Salt cod exports collapsed to one-fifth of their value in 1919. This precipitated the bankruptcy of the country and the suspension of responsible government. In the area of education the outstanding feature of the crisis was the “savage cut” in expenditure. By 1933 an expenditure of just over \$1 million had been more than halved (McCann 191), even though spending per pupil was already woefully low — less than \$20 compared with over \$100 in Ontario and \$40 in Prince Edward Island. Expenditure on building and repairing schools, cut by 67 percent, suffered most. Conditions were so bad that only a special payment of funds by the Dominions Office prevented the closure of many schools. Enrolment was also negatively affected; it was lower in absolute terms in 1936 than in 1931.

Spending on education did not again reach 1931 levels until 1937, and as a percentage of total government spending it did not again approach nineteenth-century levels until the end of the decade. It was not until towards the end of the Second World War that the provision of educational services began to improve. Progress was then rapid, but the general picture of education in the mid-1940s was, at least as far as the qualifications of teachers were concerned, “not greatly in advance of that of the late nineteenth and early twentieth centuries” (McCann 201). Regional inequalities in educational provision clearly persisted. They become difficult to monitor after 1920, though, since the listing of schools on the basis of community ceased after the creation of the Department of Education. Overall, educational provision was less than adequate in the period of 1921 to 1946.

Conditions improved in the 1940s. By 1946, following the introduction of compulsory attendance for children between the ages of 7 and 13 in 1942, over 99 percent of the 5-15 age group was attending school (McCann 204). Care is needed in interpreting these figures, since only 73.3 percent of the same age group were in school *on a daily basis* (McCann 203). The Commission of Government paid attention to education in the 1940s, and by 1949 had built 555 new schools and renovated almost half that number. However, this represented only modest changes in the nature of the elementary education system.

After Confederation, improvements in education were an important aspect of the transformation of the province. Between 1951 and 1971 the number of schools declined. Many small schools were closed and centrally-located high schools were constructed. The number of teachers rose from 2,499 to 6,437 in this period (McCann 216). By 1986 there were over 13 teachers per school on average, and the

last uncertified teacher had gone from the system. An educational revolution had taken place.

As noted earlier, one of the key themes of McCann's work is the relationship between education and the economy, and he suggests that the educational system "bears some relationship, direct or indirect, to the economy" (McCann 242). However, it is clear from his study that the nature of this relationship is not easy to discern. Nowhere is this more in evidence than in his comments on the much-cited work of the late David Alexander, who argued in a 1980 essay that literacy and economic development are linked, suggesting that low levels of literacy inhibited Newfoundland's development in the nineteenth century. Alexander makes a human capital argument of the kind which has become common in recent years. Economic failure is blamed on poor education, which in turn is blamed on an inappropriate curriculum. Such an analysis is often linked to a political argument to get governments to put in place programs which will increase education and training levels as a way of increasing economic competitiveness.

McCann takes a different, and, to my mind, more useful and realistic tack in relation to the education and economy connection. He takes "the economy and its productive capacity ... as the material setting" and looks at how this influenced "the levels of quality which the education system was able to attain" (McCann 114). In other words, his focus is on how the economy limited the development of education. His conclusion? If anything, it seems that high standards of education were a *result* of relatively good economic conditions rather than a *cause* of economic advancement. But even within this general framework, patterns of provision are uneven over time and space and in terms of class and religion. This is because education policy is shaped by class and religious interests.

The main thrust of McCann's critique of Alexander's work is with the problem of measurement. McCann raises questions about the data which Alexander used, arguing that his figures on educational attainment need revising downward and that the relationship between literacy and attendance is more problematic than he recognized (McCann 138-140). For example, Alexander's calculations assumed a close connection between access to schooling and literacy. Yet, as McCann argues, "in Newfoundland in the late nineteenth century, the competence of the teaching force, the level of educational provision, the standards in annual examinations, in addition to financial and environmental factors, would have to enter the equation before calculations of a connection between literacy and attendance could realistically be attempted" (140). In fact, school attendance rose from 61.1 percent in 1861 to 66.8 percent in 1901. But achievement of advanced competence in reading fell, according to the measures used at the time, from 7.5 percent of ages 5-15 to five percent in the same period (McCann 140). His conclusion is that "many more factors than school attendance must be taken into account when estimating the achievement of children in reading skills" (McCann 140). This is an observation which is not only

important for those doing historical work on education, but for those who comment on changes in educational standards — often held to be falling — in the present day.

McCann's warning that promoters of a human capital analysis of education are wont to over-value education as an agent of social change is well taken. It is a lesson that those with a knowledge of the history of education should appreciate. The same point should be made about those who see education as a means of solving a range of social problems from violence to economic stagnation. Those interested in thinking critically about the relationship between educational reform and economic recovery should read McCann's "postscript" to *Schooling in a Fishing Society*, added in December 1992 (229-240).

*Schooling in a Fishing Society* deserves to be widely circulated and read by all those interested in education, and indeed in social policy and economic development in Newfoundland. Presented as a collection of statistics dealing with education and economy, it is in fact much more than this. It is a history of Newfoundland which seeks to discuss education in relation to economy and society. It is a fine book, rich in insights and observations.<sup>2</sup> It is also the source of many questions about an inadequately researched aspect of Newfoundland history, questions which should be the focus of discussion and further work. For example, if, using achievement in advanced standards in the 3Rs as a measure (McCann 135), there was a decline in educational standards from 1861 to 1916, and the greatest deterioration took place in the outport regions outside the Avalon Peninsula, and the Methodists suffered the least decline, how do we account for this?

McCann's study is timely and important. It can help us consider the problems of assessing the complex relationship between education and economy and society. If its only achievement is to encourage people to think past the glib statements about the powers of education, which seem to slip so easily off the lips of uncritical boosters of education-for-economic-development, then this study will have been worthwhile.

## References

- Gatrell, V. A. C., B. Lenman and G. Parker, eds. 1980. *Crime and the Law: The Social History of Crime in Western Europe Since 1500*. London: Europa.
- Gwyn, Richard. 1968. *Smallwood: The Unlikely Revolutionary*. Toronto: McClelland and Stewart.
- Harris, Leslie. 1984. "Gateway to the Future." *Newfoundland Churchman* 28.2: 23.
- Hope Simpson, John. 1935. "The Future of Newfoundland." *Evening Telegram* March 14: 12-13.
- House, Doug. 1998. "Education Key to Success." *Evening Telegram* March 18: 6.
- Leyton, Elliott, Willam O'Grady and James Overton. 2000. *Violence and Public Anxiety: A Canadian Case*. 2nd ed. St. John's: ISER.

- Macfarland, Alison. 1990. "Statistics — sustaining government or serving society?" *Critical Public Health* No. 3: 33-41.
- Scott, John. 2001. "Where shall we sail our ship of state." *Evening Telegram* August 5: A13.
- Shaw, Martin and Ian Miles. 1979. "The Social Roots of Statistical Knowledge." In John Irvine, Ian Miles and Jeff Evans, eds., *Demystifying Social Statistics*. London: Pluto Press: 27-38.
- Shuttleworth, James Kay. 1853. *Public Education*. London: Longman, Brown, Green, and Longman.
- Tooze, J. Adam. 1998. "Imagining national economies: national and international economic statistics, 1900-1950." In Geoffrey Cubitt, ed., *Imagining Nations*. Manchester: Manchester University Press. 212-228.
- Valpy, Michael. 1993. "Don't expect school to do the family's job." *Globe and Mail* December 1: A2.

## Notes

<sup>1</sup>It would be useful to have a history of the production and use of statistics by the state and other agencies in Newfoundland. To my knowledge, no work has yet been done in this area.

<sup>2</sup>There are a few minor errors in the text. The title of David Alexander's article "Literacy and Economic Development in Newfoundland" is given as "Literacy and Economic Conditions" in footnote 104; and "Arms and Objectives of Education" should surely read "Aims and Objectives of Education" (234).