Public Spending on Education in the Canadian Provinces: Some Comments on Ellis' Paper Toward Reframing Rather than Recycling Old Ideas About Educational Expenditures

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Abstract

This short article provides a critique of Dr. Ellis' paper in a recent edition of the Canadian Journal of Educational Administration and Policy (CJEAP), focusing on where future Canadian research in educational finance can have practical implications rather than simply offering transitory displays of polemical fireworks.

Focal Points

Former American President Calvin Coolidge once said that any economy is idealism in its most practical form. Therein lies a central issue: should political ideology be applied in educational finance? Professor Ellis' article goes to the nub of fiscal policymaking in public education. His thesis is clear: K-12 British Columbia education has not suffered from onerous budgetary restraints over the past half-century. So too is his overall argument compelling—*the simple story* of neoliberalism brushes aside much in the educational fiscal history of British Columbia. On a per-capita basis, education budgets have flourished in British Columbia because governments of several political stripes were unsuccessful in turning down the taps, or conversely, were successful in opening the spigots over the past 50 years. In pointing out that neoliberalism did not prevail, the paper does not read as a broadside from/against the Fraser Institute but rather as a deep questioning of assumptions many hold about the annual budget merry-go-round.

My criticism does not revolve around Dr. Ellis' purpose when looking at past expenditures. Dr. Ellis' paper was argued using Ministry data without much methodological sophistication: even the lowly standard deviation did not make an appearance in his analysis. Inflation was duly recognized and smoothed out using Statistics Canada figures. He does acknowledge the complexity in tracking spending: recognizing differences between capital and operating costs; teacher salaries and educator pensions, part-time and full-time equivalent students; and difficulties in the overlap among school year, calendar year, and fiscal year when depicting a "trend." Certainly, there are limitations to any conceptual framework for examining expenditures in Canadian education. For the most part, Dr. Ellis stayed close to the traditional accounting categorizations without trying to impose a political ideology on his findings. Hence, I hesitate to criticize a colleague over methods, especially as someone living in a 'big tent' (Donmoyer, 1999) where there are so few scholars delving into educational finance.

Flawed Methodology

Yet technically, you cannot paper over data collected and categorized according to three different assumptions, thus mixing apples with crab apples and pineapples, with simplistic admonitions for a reader to be "cautious". Dr. Ellis split his study into three different tranches of data, pointing out that "the figures for the second period (1975-2001) include capital spending and government contributions to teachers' pensions, whereas the figures for the third period (2001-present) do not include capital spending" (p. 104). That is no small matter. Inserting and then withdrawing capital or pension expenditures in the mix undermines a longitudinal appraisal.

More crucially, a question remains about how the BC Ministry may have shifted in its definition of an FTE student over 50 years. Are First Nations students, Offshore or Independent School students in or out of the study, given the introduction of a Personal Identification Number (PEN) in 1993? Given these uncertainties, do we need to back up 50 years to take a flying leap into the present, to quote Stephen Leacock? Is a rolling five-year average sufficient for a longitudinal study? The historic or normative or criterion comparator is always important. For a cross-sectional study, do we compare BC with Ontario or with the rest of Canada as a whole? Of course, the choice of comparator relates to purpose, and Dr. Ellis' purpose is laudatory—to call for researchers to apply new conceptual frameworks to educational finance matters. Therefore, if Professor Ellis' paper has enduring value, it is in undermining the tiresome binary of neoliberal versus progressive ideologies.

Indeed, Dr. Ellis' purpose and thesis have many implications, particularly through attributions of causality. Even simple narratives about the causes of educational spending frequently invoke what is known as Hume's guillotine--that is, fallacious 'is-ought' arguments in philosophy and policy (Black, 1964) which colour the facts with moral arguments. The signal achievement of Dr. Ellis' article is that he upholds Hume's law to puncture political rhetoric by indicating that educational spending increased by 250%, whereas total provincial student enrollment increased by 110% over the half-century under review. Professor Ellis recognized his analyses will send a chill through Treasury Boards, without a fulsome explanation of how public expectations on schools have changed remarkably over the past 50 years. So, he sensibly counsels much more research into educational finance in BC and the rest of Canada before adopting the sweeping judgements and moral rectitude of reformers.

Astronomers recognize the first step in stargazing is wiping the telescopic lens clean; much dialectical crud clouds our lens on educational bookkeeping and taxation. It might be said that the summary conclusions in this essay are not surprising. Dr. Ellis' analyses corroborate longitudinal studies conducted and made public by Statistics Canada through its Pan Canadian Education Indicators Program since the 1990s that show educational expenditures have consistently crept upward in every jurisdiction (Statistics Canada, 2021). The nexus of policymaking and budgets sits at the center of this study. I once served a deputy minister who pointed out the enormous length of the administrative chain between his office and the classroom—that is, between policy and practice. Likewise, he repeatedly pointed out the close decision-making proximity of his office to the Treasury Board—that is, between policy and educational finance. That deputy ministers often serve successive ministers points to distinctions between policy and politics. If anything, Ellis' paper echoes those observations about distance and influence.

Indeed, we cannot discuss budgeting without considering the role of the permanent civil service when assembling budget documentation and making recommendations. One of the shortfalls of many social justice activists with their causes is their knowing little about how civil servants accomplish their analyses or the basic structures of government. They do not see the difference between an Assistant Deputy Minister and a Ministerial Assistant, between a caucus member and Cabinet Minister, between a Cabinet policy advisor and a Treasury Board analyst, between fiscal policy and political ideology. Without a rudimentary grasp of political science fundamentals in Westminster democratic operations, it becomes easier to mouth slogans and claim "austerity" in over-broad brushstrokes than to engage in scholarship. There are many varieties of neo-liberalism (Birch, 2015): while not diminishing some precepts' explanatory value in sociology, scholars must show and know which variety's concepts are being applied in statistical analyses.

As befits the quantitative researcher, Dr. Ellis is sensitive to causation and correlates. So we might remain vigilant that we do not have a reverse causation here. Increased public spending in education could cause British Columbia Teachers' Federation activism, school district rent-seeking and judicial activism, not the inverse. While we know much about the budgetary impact of educational spending on labour market outcomes (Riddell, 2016), we do not know much in reverse about labour market impacts on (under) graduate student enrollment and demand. That will take us to the revenue side of the public ledger. Indeed, it is hardly possible to talk meaningfully about educational expenditures without considering parallel evolutions in taxation policy within provincial Ministries. Property taxation and property assessment proceed in symbiosis with educational spending. Dr. Ellis scrupulously avoided those questions,

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summarizing enormous complexity in brief statements about two or three variegated pools of funding.

So, what causal claims are actually supported by evidence in this article (Hoover, 2008)? Economists rely on hypotheses that are rigorously tested through dif-in-dif estimations, a four-cell matrix, and counterfactuals (Ciani & Fisher, 2019). Causality in regression analysis requires that all the explanatory variables are fixed (exogenous). If the explanatory variable(s) is correlated with the error term, the estimates are biased and inconsistent (and therefore can not be causal). The only truly trusted way to ensure causality is with controlled experiments, even though social scientists use quasi-experimental approaches. Instead, Ellis relied on sweeping, over-broad conjectures unsupported with a detailed investigation, indeed no statistical analysis at all, and inadequate, sometimes no, references when imputing causation.

Factors in Spending

Ellis has identified some obvious factors to explain expenditure growth: an activist teachers' federation which strategically whipsawed school districts; school districts seeking to aggrandize through international student tuition agreements; the difficulties of keeping educational barrels staunched at the end of an electoral cycle. But he could highlight other exogenous factors, some of which lie beyond the control of legislators and the perspectives of many education professors.

One external agency is the courts in setting out new fiscal rules to match *Charter of Rights and Freedoms* requirements. Ellis does point out Supreme Court decisions in 2016 on class size and composition, but he could go much further. A series of appellate court decisions in British Columbia and elsewhere about funding autism/special education services have led provincial ministries down the slippery slope of *Charter* contextual analysis. Certainly, the *Rose des Vents* and *Conseil scolaire francophone c. BC Ministry of Education* decisions by the Supreme Court of Canada in 2015-20 will have long-term reverberations for fiscal policy in British Columbia and all provinces. An independent judiciary and labour arbitration panels have increased provincial governments' obligations to fund special education/ minority language education/local collective agreements, both in instruction and in facilities at levels comparable to the majority. We need more practical insight like the econometric forecasting and options offered by Professor Mason in Manitoba's recent labour arbitration to a Winnipeg-centered school district (Pembina Trails Teachers' Association v. Pembina Trails SD, 2021) to guide the invisible hand, not more polemics. In other words, increased educational spending over the past fifty years has come with increasing attention to disadvantaged segments of the student population. The 'money creep' may have followed 'mission creep' to better serve the marginalized.

There may be endogenous factors as well. We should not overlook the internal rivalry within any Cabinet, caucus, and among Ministries as a factor in stimulating spending. Much of my own experience in provincial governments on public financial matters involved witnessing Cabinet members engaged in an intense struggle to determine whether public spending should go to health care or education, in both capital and operating budgets. Hip replacements or early learning programs? New hospitals or new schools? In fact, we do not know much about the rivalry among professions over the public purse. We do not really know whether degree nurses are paid commensurate to degree teachers, if non-degree nursing assistants are paid commensurate to educational assistants. Often, a temporary truce among rival professional groups is obtained by allocating increases to both in collective bargaining, but to the detriment of highways and roads or other Ministries' concerns. Of course, public spending follows public opinion. Demands by legislators for new schools in their constituencies, for a "satisficed" professional workforce, and for expansion of educational services to encompass those students who have been historically underserved—all may have been factors.

So, the larger question remains, how do Canadian provincial ministries construct educational budgets? Answering that question may carry us across an interactive but artificial border between educational administration and public administration. We cannot ignore the lobbying of central office administrators and school boards. Thankfully, a sound and current description of educational budgeting is provided by Ortynski and colleagues (2021). An incremental approach is common across the country, approximating Lindblom's science of muddling through. The root theory of political ideology and partisan party platforms appears to hold little sway when setting the allocations; instead, adjustments are made year-over-year within the overall aim of preserving stability and some degree of balance among rival interests. Certainly, reform of budget processes that are overwhelmingly incremental in nature is due in education. Ortynski and associates (2021) recommended that provincial ministries look not at performance-based funding models, which are excessively data-demanding, but rather at productivity-based funding where dividends are re-invested in emergent programs. Accompanying those changes must be detailed comparative analyses. Ellis' essay is one superficial historical sally into the BC case, but we will need many more studies of educational budgeting across the Canadian provinces (Imbeau, 2000) in the next five years. Seemingly Unrelated Regression (SUR) analyses, structural equation modelling, and a host of other econometric techniques infrequently used by educational psychologists will be required.

COVID-19 and its aftermath may spur substantial budgetary change. Governments will undoubtedly be dealing with and attempting to curb massive public expenditures relating to the pandemic in 2020-2023 and beyond. In the post-pandemic period, the medical profession and health care sector will emerge with enhanced power, burnished public prestige, and increased muscle—as will seniors in old folks' homes—to the point they command an even greater portion of the public purse. This will come, as it has over the past two decades, at the proportional expense of K-12 education and the post-secondary segment of education. In some provinces, health care already consumes more than 50% of its annual budget. Health care may figuratively eat education's lunch. We can forecast increased expenditures for medical technology that goes beep in the night, for labs and syringes, for increased lab testing, and for preparing for the next pandemic (there will always be variants)—to the detriment of teachers' salaries and bricks-and-mortar for new school buildings. New hospital/LTC workers may assume even greater priority than Grade 1 readers and educational assistants. Already, according to the British Columbia Teachers' Federation (BCTF), education funding in BC has decreased as a share of the provincial GDP (Hemingway, 2016). This thesis implicitly undermines Ellis' finding and explicitly contradicts his methodology since he has not looked at human capital formation using production function models.

Future Research

Two areas where much more research needs to be accomplished relate to those subcategories of public spending that wobble in and out of Ellis' half-century of BC data. Both sit at the juncture of public finance and private sector concerns. Both also take us into leadership and administrative questions; we can hardly discern the contours of educational leadership without considering financial matters (perhaps surprisingly, we know next to nothing about how school or central office officials read, interpret and act on financial data). Both determine an educator's prospective lifestyle and current work conditions, so we can hardly see either as irrelevant to teaching and learning.

The first under-investigated zone is government allocations for teacher pensions and whether public pension funds have kept pace with inflation and federal income tax policy shifts. Teachers' pension plans and retirement funds, the defined benefit versus defined contribution plans, matching contributions and unfunded liabilities, purchasing power and investment risk assessment, are live issues. How well pension plan managers have invested teachers' contributions—both the teacher and the government portions—is a weighty public policy matter, not simply a private sector concern. Governments have increasingly looked at these pools of capital as ways of alleviating their budget pressures.

The second zone requiring intense examination is the capital side of the ledger. We need innovative concepts for looking at public infrastructure spending beyond bricks-and-mortar buildings, asphalt rooves, and heating plants in the SUCH (schools, universities, colleges, hospitals) sector as it is known in BC. In other provinces, capital spending must be analyzed across the MUSH sector (municipalities, universities, schools, hospitals). Investments in technology, municipal swimming pools, public transit, consolidated libraries, recreation facilities proximate to schools, and joint use facilities await new conceptual frameworks and an accompanying vocabulary that can be retrofit on an historic data set. Moreover, for this capital spending, we need new benchmarks that recognize relatively fluid structural and personnel costs and high utility costs in a Canadian context. For example, what is the appropriate tripartite Canadian ratio of a) construction to b) utility, maintenance, and repair to c) professional costs, amortized over 25 years? Estimated ratios are subject to much dispute. They range from a 1:5:200 ratio in the UK, now disparaged as an urban myth, to 1:8:80 in the United States. But what are they in Canada, where energy costs are higher and salary costs vary by school and district (Hughes et al., 2004; Ive, 2006; Ive et al., 2015; Wu & Clements-Croome, 2007)? At a practical level, how does a green economy impact on those ratios?

Therefore, when doing future work in educational finance, we might seek out Canadian scholarly

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frameworks that introduce and focus the reader on a new set of budgetary concepts. For example, Mou et al. (2018) have been exploring "old fiscal rules" and trying to shift scholarly attention toward the emergence of new fiscal principles and rules. Poole and Fallon (2015) have started to look at collateral policy for private schools rather than engaging in perennial polemics about unbalanced budgets, union perfidy, and shiftless leftish governments. Indeed, are there any fiscal policy rules at all in the post-pandemic world as it relates to the so-called ideological proclivities of parties in power in Canada and public spending? Does the Cameron thesis apply in any way in BC (Simon & Tatalovich, 2014)?

Adopting and applying new frameworks may enable us all to escape the stale slanging of neoliberals doing battle with social justice warriors. If the public persists in seeing public education costs within a very traditional, political science, left-wing right-wing framework, then it will fail to see public education as shaped by many new ideas in economics. We need to move beyond perpetuating and continuously recycling the old "policy" concepts of the 1960s and 1970s, avoiding the dichotomous more/less frameworks of the past. Pragmatic considerations rather than excessive idealism should govern research in educational finance.

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