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| *Canadian Journal of Educational Administration and Policy,* Issue #21, June 28, 2002. © by *CJEAP* and the author(s).**School District Deficits and Program Choice in Alberta**by Dean Neu, Alison Taylor and Elizabeth Ocampo, University of AlbertaThe recent public teachers strike in February 2002 and continuing contract dispute in Alberta has brought into sharp focus the issue of the financial position of school districts. Media reporting on the strike was rife with rhetoric backed up by numbers that seem to speak for themselves. But do they? We heard that districts have surpluses and deficits, that some have the ability to pay, that other districts have no more money. But what exactly is a surplus and who is most affected by these accounting realities?Take, for example, the most recent financial statements for two of the districts that reached tentative agreements during the course of the strike. The ATA endorsed one agreement but not the other because it was felt that one would draw money out of the classroom whereas the other would not. However a closer look at the numbers indicates that the magnitude of the surpluses is dependent on the program spending choices that the districts had made. For the year ended August 31, 2001, the first district had an operating surplus of $1.9M, with a surplus of $276,000 in the education of the severely disabled. In other words it spent less money in this area than it received in revenues over the course of the year, contributing to the overall surplus. In contrast, the second district had an operating surplus of $1.2M but deficits of $117,000 and $213,000 in the areas of education for the severely disabled and technology integration. This district appears to have spent more money on these two specialized programs than it received, thereby reducing the magnitude of its overall surplus. Without these under and over spendings, the two districts would have had similar surpluses of $1.6 and $1.5M respectively.This simplified re-working of the numbers hints at the ways in which program spending can impact on the financial position of school districts. In this study we examine the notion of a school district surplus/deficit and the relationship between these and program choices. Starting from the financial information for the population of Alberta School Districts for the 1997 to 2000 fiscal years, we consider two empirical questions:1. what percentage of Alberta school districts have operating deficits and has this percentage changed over time?2. what is the relationship between sub-program spending in the areas of severely disabled education, ESL education and technology integration, and the presence or absence of surpluses/deficits?Although our analysis is site-specific, it should be of interest to not only Alberta educators and policy-makers but also to those in other jurisdictions. Over the last decade, school systems in Canada and other industrialized countries have undergone extensive reforms (Levin, 2001; Levin & Young, 1999). In Canada, for example, Ontario introduced Bill 160 which centralized funding, cut the number of school boards from 129 to 72, reduced the number of trustees from 1900 to 700, and set up school councils (Canada and the World Backgrounder, 1998). Quebec also rationalized the number of school boards and introduced governing boards. Changes were also introduced in New Brunswick, Nova Scotia, Manitoba, British Columbia and Newfoundland (Fleming, 1997; Fleming & Hutton, 1997; Lawton & Canadian Education Association., 1996).In Alberta, the first three year business plan for education cut funding, reduced the number of school districts by approximately 50 percent, centralized funding and encouraged school-based decision-making. Eight years after these reforms, this study looks at the financial position of Alberta school districts. It also provides indirect evidence regarding the horizontal equity of educational opportunities across school districts where horizontal equity is defined as the equality of per-student funding and expenditures across school districts (cf. Burke, 1999; Elhav, 1998; Neu, Peters, & Taylor, 2002 forthcoming; Oesch & Paquette, 1995; Verstegen, 1996). Like previous studies in the area of equity, we assume that financial equity is a partial but useful proxy for the presence or absence of equality of opportunity (cf. Cohn & Geske, 1990; Coleman, 1990). Our analysis highlights how the financial performance of individual school districts is closely associated with the specific program spending choices made by different school districtsóchoices that arguably influence the quality of education available to students in different programs in different districts. From this vantage point, the presence of financial surpluses may have as much to do with differing notions of what counts as an "adequate" education as with issues of management "efficiency".**Surpluses and Educational Funding in Alberta**In January 1994, Education Minister Halvar Jonson introduced sweeping changes that restructured the public education system in the province (Bruce & Schwartz, 1997). On the funding front, these changes included: (1) a 12.4 percent reduction in education funding over a four year period, (2) a 5 percent wage rollback for public sector workers, including teachers, (3) centralization of revenue collection and removal of the ability of individual school boards to raise funds through taxation, (4) a more "equitable" block funding framework which determined how much funding each school board would receive, and (5) a cap on administrative expenditures within the support block at 4 percent of the funds available for instruction (Peters, 1999).The funding framework developed by the province was first introduced during the 1995-96 school year. As government documents note, it consists of three blocks. The Instruction block provides for the cost of principals, teachers, instructional support staff, learning resources. Funds are allocated on a per student basis with differential rates for different types of students. The instructional block also contains a distance and sparsity component for geographically-dispersed school districts. The support block funds support services such as board governance and administration, operations and maintenance of facilities and student transportation. Again, the distribution of these funds is based upon pre-established formulas. The capital block supports the construction of facilities and for capital loan repayments on previously built facilities. For the 2000 fiscal year, the instructional block accounted for 67% of total revenues received by school districts.Within the instructional block, the majority of the funds are allocated on a per student basis with funding amounts "attached" to different types of sub-programs. For example for the 2000 school year, the basic instructional grant per K-9 student was $3976, for eligible severely disabled students the grant was between $9177 and $11948 depending on the nature of the disability, in the ESL area the grant was $677 per eligible student and $40 per student was allocated for technology integration. In the area of severely disabled students, students are "coded" by the districts in consultation with external experts. The coding is then subsequently verified by Alberta Learning.One of the reporting requirements for Alberta School Districts is that they prepare financial statements on a yearly basis. These financial statements consist of three primary financial statements along with supporting schedules. The Statement of Financial Position lists the assets, liability and net equity of a school district at a point in time (i.e. the financial yearend). The Statement of Revenues and Expenditures summarizes the revenues, expenditures and resultant financial surplus/deficit for the fiscal year whereas the Statement of Cash Flows summarizes the changes in cash balances over the course of the fiscal year.In simplest terms, a surplus on the Statement of Revenue and Expense indicates that the money that school districts received in the form of government grants and other revenues exceeded the amount that it spent on providing educational services during the preceding year. Surplus doesn't mean that the school district has "money in the bank" but simply that revenues exceeded expenses. Like a household, the excess of revenues over expenditures may be invested in other assets (i.e. equipment and infrastructure) that are expected to provide benefits in the future. During the recent strike when commentators stated that salary increases could be paid out of surpluses the assumption was that revenues would continue to exceed school district expenses in the foreseeable future.Funding to school districts is determined by a provincial funding formula that applies to all districtsówhy is it then that certain districts have surpluses whereas others do not? The annual reports filed by school districts along with a consideration of the budgeting processes used by the school districts provide us with some information. The supporting schedules (i.e. Schedule 4: Analysis of Instruction Revenue and Expenses) indicate that school districts spend different amounts on targeted programs such as severely disabled education, ESL and technology integration. As mentioned previously, the provincial funding formula provides fixed amounts of funding for the sub-programs. If districts think that the provided amounts are inadequate given their educational mandate, they are likely to spend more than the revenues they have received thereby incurring "deficits" in these sub-program areas. Since these "mini" surpluses/deficits contribute to the overall surplus/deficit reported on the Statement of Revenues and Expenses, the program choices that school districts make in these areas are critical for the overall financial performance of the school district.The preceding suggests that school districts have some flexibility in how and where they spend the monies that they receive. However as budget documents for the Calgary Board of Education indicate, this flexibility exists within constraints (Calgary Board of Education 2001, p. 5). Not only does the funding formula limit the funds that can be shifted between different funding envelopes (i.e. instruction versus support block) but also within the instructional block itself the funding mechanism in most cases is providing funds on a "per student" basis. Thus, in practice, the flexibility in shifting funds between subprograms is limited to a percentage of the funds available. Furthermore, given that school districts operate in a revenue-constrained situation, a deficit in a subprogram area impacts on the overall surpluses and deficits for Alberta School Districts.**Government Funding Levels and School District Deficits**Since the early 1980s, educational funding in Alberta has been cyclical (Neu, 1999; Neu & Taylor, 2000). Throughout the 1980s, per-student constant dollar funding increased, reaching a peak around 1987. From this point onward per-student constant dollar funding levels declined, bottoming out around 1997. The last four years have seen these funding levels increase, inching back upward toward the levels of the early 1990s.**Figure 1: Historical Funding Patterns**With this context in mind, the financial situation faced by school districts during the latter half of the 1990s has been difficult. Although school districts are experiencing some per-student real dollar increases in funding, the funding levels are still less than the funding levels received between 1984 and 1994.To assess the impact of government funding levels on the financial performance of Alberta School Districts, we gathered revenue and expenditure information for the population of school districts for the last four fiscal years for which financial information is publicly available (1997-2000). This information was gathered from the individual school district financial statements that are available on the Alberta Learning website (<http://www.learning.gov.ab.ca/funding/afs/>) and includes the financial information contained in the Statement of Revenues and Expenses as well as the sub-program information contained in the supporting schedules. This information forms the basis for our analysis.Table 1 contains a summary of the percentage of school districts in each of the last four years that had an overall financial surplus as well as the percentage that had surpluses in the previously identified three instructional sub-program areas. A district was coded as having a surplus if revenues were greater than or equal to expenses. Districts where revenues were less than expenses were coded as having a deficit.**Table 1: School District Surplus Numbers**

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| **Fiscal Year** | **Districts with an Overall Surplus** | **Districts with a surplus in the Disabled Sub-Program** | **Districts with a surplus in the ESL Sub-Program** | **Districts with a surplus in the technology integration Sub-Program** |
| **2000** | 76.67% | 21.67% | 53.33% | 38.33% |
| **1999** | 56.67% | 16.67% | 61.67% | 36.67% |
| **1998** | 60.00% | 11.67% | 60.00% | 30.00% |
| **1997** | 66.15% | 13.85% | 69.23% | 38.46% |

N = 60 school districtsIn terms of overall surpluses, the percentage of school districts with surpluses has varied between a low of 57% to the current high of 77%. For the 2000 fiscal year, 46 of 60 school districts had surpluses and the remainder had deficits. The average size of the surplus for the 46 districts that had surpluses was approximately $1M and the average size of the deficit for the 14 districts with deficits was approximately $240,000.The results for the different sub-program areas tell a different story, however. In the areas of severely disabled education and technology integration deficits are the norm rather than the exception. For example, the percentage of school districts with surpluses in the area of severely disabled education has ranged from a low of 12% to the current high of 22%. In the ESL area the percentage of districts with a surplus has ranged from a high of 69% to the current low of 53%. The area of technology integration has seen smaller variations with the percentage of districts having surpluses varying between 30% and 38%. In terms of absolute dollars, the information for the 2000 fiscal year indicates that the average deficits for the districts that had deficits in the specific sub-programs was approximately $450,000 in the severely disabled area, $60,000 in the ESL area and $180,000 in the technology integration area.The preceding data indicate that, in the areas of severely disabled education and technology integration, school districts have consistently incurred deficits (see also, Neu, Peters, & Taylor, 2002). In the area of ESL education a similar conclusion is possible given that districts with no ESL students and thus no revenues and expenditures (a surplus of zero) were coded as having surpluses since revenues were equal to expenditures. The removal of these districts from the calculation also resulted in the majority of the school districts with ESL programs running a deficit.Undoubtedly the presence of a sub-program deficit/surplus is a consequence of differing efficiencies and economies of scale across school districts in their use of sub-program funds. Yet, the pervasiveness of deficits in the sub-programs suggests that, in aggregate, a systemic relationship exists between the level of sub-program funding and the presence of deficits. Our interpretation is that the majority of school districts are attempting to maintain equity in the areas of severely disabled and ESL education. While government funding formulas attempt to impose horizontal equity within the sub-programs by providing a fixed per-student amount of funding (cf. Berne & Stiefal, 1979; Berne & Stiefel, 1984), arguably horizontal equity across different groups of students is compromised when the funding levels attached to specific sub-programs are inadequate. Thus it appears that individual districts have attempted to buffer students in these areas from the full impact of the new funding formula (cf. Taylor, Neu, & Peters, 2002 forthcoming). This is not to suggest that horizontal equity existed previously (Watt & Roessingh, 1994) or that students and staff have not been affected by the funding changes (cf. Alberta\_Learning, 1998) but rather that school districts have attempted to prevent further erosions to equity within the constraints of the new funding formula.**The Impact of Program Choice on District Deficits**To assess the impact of program choice on the overall school district deficits, we concentrate on the population of school districts for the 2000 fiscal year. Table 2 reports what happens to the overall deficit/surplus when the deficits or surpluses attributable to a specific subprogram are removed. While it is obvious that these removals will impact on the magnitude of the surplus/deficit number, we are interested in whether the removal of a specific subprogram component has the potential to change the school districts deficit to a surplus and vice-versa. The percentage of "switches" provides an indication of the impact that programming decisions in certain areas have on the overall financial performance of a school district. This method of analysis was chosen because, by construction, the overall surplus and sub-program surpluses are correlated making the use of ordinary least squares regression techniques problematic (Gujarati, 1995, pp. 52-68). This method also has the benefit of adjusting for size differences across school districts.**Table 2: Surplus Sensitivity to Sub-Program Results (2000)**

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|  | **# of Districts with Deficits** | **Switch to Overall Surplus when Sub-Program Removed** | **Percentage of Districts that switch from deficit to surplus** | **# of Districts with Surpluses** | **Switch to Overall Deficit when Sub-Program Removed** | **Percentage of Districts that switch from surplus to deficit** | **Total Switches** |
| **Disabled****Sub-Program** | 14 | 12 | 87% | 46 | 4 | 9% | 16 |
| **ESL****Sub-Program** | 14 | 5 | 36% | 46 | 6 | 13% | 11 |
| **Technology****Sub-Program** | 14 | 8 | 57% | 46 | 8 | 17% | 16 |

The data contained in Table 2 indicate that there is a high degree of association between school district programming choices and the presence/absence of a surplus. For example, of the 14 school districts that reported a deficit in 2000, 12 (87%) would have reported an overall surplus had they not run a deficit in the area of severely disabled education. Likewise, in the area of ESL education, 5 of 14 (36%) districts and in the area of technology integration 8 of 14 (57%) districts would have reported an overall surplus in they hadn't run deficits in these subprograms.Interestingly, these program spending choices can also operate in the opposite direction. Although the number of switches from overall surpluses to overall deficits is less common there were school districts in which the presence of a sub-program operating surplus made the difference between an overall surplus and deficit. This occurred in 4 of 46 (9%) districts in the area of severely disabled education, 6 of 46 (13%) in the area of ESL education and 8 of 46 (17%) in the area of technology integration. In terms of the equity issues mentioned previously, these are cases that would be interesting to study in greater depth.**Conclusion**This study has examined the topic of school district deficits and programming choices in Alberta. Our analysis suggests four conclusions. First, while the number of school districts with overall deficits is small, there is a recurring pattern of deficits in the sub-program areas of severely-disabled education, ESL education and the area of technology integration. Indeed, for the 2000 fiscal year, 78% of the school districts incurred an operating deficit in the area of severely disabled education. Second, the presence or absence of overall school district deficits was closely associated with deficits in the sub-program areas. For example, 12 of 14 school districts that had an overall deficit in 2000, would have been in a surplus position had they not incurred a deficit in the area of severely-disable education. This result suggests that school districts that incurred deficits in these areas may have attempted to maintain equity by buffering severely-disabled students and ESL students from the full impact of the changes in funding mechanisms, cuts to funding and inadequate levels of targeted funds.Our conclusions are based upon an analysis of the financial data for the population of school districts for the 1997 to 2000 fiscal years. It is important to acknowledge, however, that such aggregate results must be interpreted with caution. First, the numbers give us a snapshot of the aggregate results for entire districts. However it is difficult on the basis of such aggregate numbers to draw conclusions about what is happening at the level of individual schools. Second the analysis focuses on program spending within different boardsóbut on the basis of this type of analysis we cannot say anything about the "efficiency" of different districts in using the provided monies. While studies in the economics of education have demonstrated a correlation between monetary inputs and educational outputs on an aggregate level (Harter, 1999; Hartman, 1999), exceptions at the level of individual districts sometimes exist. Finally, aggregate numbers always contain "noise" in that administrators in different districts make decisions as to where to allocate revenues and expenses on the financial statements. This being said, the presence of such "noise" would usually mitigate against finding systematic patterns in the data. Thus the aforementioned caveats do not call into question the results of the study. 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