
Gaps in Education and in Understanding

by

Dan Ben-David

Since 1999, I have been researching and writing about a disturbing combination of facts: the steady multi-decade deterioration of Israel's educational system to the bottom of the Western world – as indicated by student achievements in international exams on core curriculum subjects – in conjunction with a progressive swelling of the country's education budgets to levels above the Western average. I have presented these findings before all of the country's leading policy-makers – prime ministers, cabinet ministers and others – as well as in various media outlets.

Publication of these findings intensified a dispute between two differing world views, a dispute accompanied by a plethora of mistaken and misleading interpretations. While the spending pendulum during the 1990s swung toward a substantial increase in education budgets, my findings contributed to its swinging back in the other direction. The complete picture emanating from my research – with its resultant socio-economic implications – did not lead, as it should have, to structural changes that would have made the education system more efficient and to an increase in student achievements to a level reflecting the large budgets. Instead, Israel's governments chose the easy path of large-scale budget cuts in education spending.

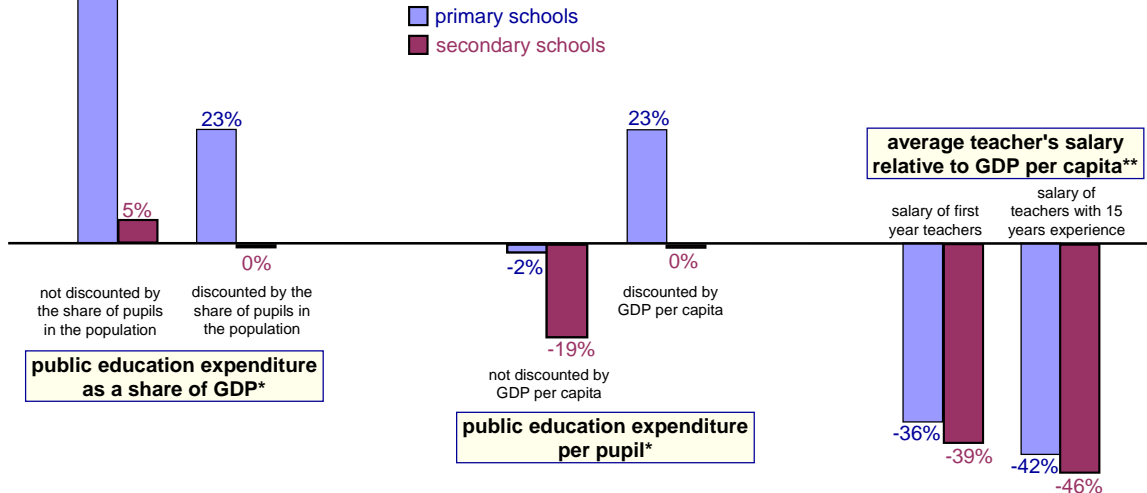
It appears that the message finally got through a few years ago, at least as far as the deterioration in achievements was concerned. A public realization of the seriousness of the problem, and its very dangerous implications, led to the creation of the Dovrat task force that recommended a structural reform in the education system. The Dovrat report has since been sent into deep freeze, but it is clear today that the current situation cannot continue.

That said, there still remains substantial disagreement regarding the magnitude of the public education expenditure. Is there a need to increase spending to Western levels, or is Israel already spending at or above these levels? It is important to emphasize that this is not an academic argument about the level of actual education expenditures – there is no quarrel about the size of these – but rather a significant dispute regarding their interpretation. These differences in interpretation, that emanate from basic gaps in economic understanding, then manifest themselves in widely differing conclusions as to the steps needed for fixing the education system.

Only when these interpretational gaps will be eliminated, will it be possible to move from symptomatic treatment accompanied by a demand for yet larger budgets to treatment of the root issues that is based on a more efficient use of existing budgets. With the coming of Professor Yuli Tamir – who believes, like her predecessors, that the primary problem is that of an insufficient budget – to the education ministry, the time has come to clarify the source of the disagreement regarding the relative level of education spending in Israel.

The crux of the issue can be seen in the graph. Public expenditure on primary education, as a share of Israel's output, is 81% higher than the average expenditure-output ratio in the OECD. The gap is 5% for secondary education. Both those who support and those who object to budget increases agree that these numbers are misleading since there are more pupils in Israel's population than in most OECD countries. When the expenditure-output ratio is normalized by discounting the share of pupils in the population, it can be seen that the spending gap falls to 23% in primary education and it is eliminated entirely in secondary education.

Gap in Education Expenditures Between Israel and the OECD



* 2002 figures, in full-time equivalents

** 2003 figures

source: Dan Ben-David, Tel-Aviv University, data from the OECD.

But instead of actually doing this simple calculation mandated by their own logical argument and making the expenditure-output ratio comparable with other countries, the supporters of budget increases abandon these numbers in favor of a new set of numbers: education expenditure per pupil. While an international comparison of spending per pupil might seem more intuitive and correct, it too is based on an inaccurate comparison. The bulk of education spending in Israel and abroad is on salaries, and as one might suspect, salaries are higher in wealthy countries and lower in poor countries.

Therefore, it is inaccurate to compare education expenditures per pupil in Israel to a group of wealthier countries – as the Education Ministry has done for years – and demand an equalization of budgets without first normalizing spending per pupil by the countries' living standards. Once the expenditure per pupil is discounted by GDP per capita (the common measure for living standards), the relative expenditure picture changes completely – and becomes identical to the earlier normalization of the expenditure-output ratio. This is not a coincidental outcome since both calculations are mathematically identical.

The main differences of opinion regarding education spending are based on a mistake made by those who do not understand the equivalence of the two calculations – the calculation that they implicitly support (normalization of the education-output ratio by the pupils-population ratio) and the calculation that they explicitly oppose (normalization of the expenditure per pupil by output per capita). However, both routes lead to the same outcome – that there is no lack of money in Israel's education system.

We spend more on primary education than the Western average. That said, the many budget cuts in recent years have effectively eliminated the spending gap in secondary education. For the first time since I began to make comparisons in 1999, there are no longer signs of excess spending on secondary education in Israel – though it is also possible to see that there is no lack of funds for this system either.

Additional numbers in the graph show that despite spending levels that are similar (in secondary education) or high (in primary education), teachers' salaries in both systems are very low in Israel, even after they are normalized by living standards. How can this be? Where is the money going?

The first possible explanation: large education budgets do not reach teachers but are instead channeled in alternative directions that advance education. In light of the dismal performance of Israeli pupils in comparison with other countries, it should be clear that if this is indeed the explanation, then – contrary to claims made by the Education Minister – the problem is not a lack of funds but the wasteful use of them.

The second possible explanation: the large education budgets do indeed reach the teachers, but it is possible that the salary data that Israel passes along to the OECD is not comparable to the foreign data. In other words, there is the “conventional” salary in Israel and then there are the back channels for providing additional monetary compensation. The implication of this explanation would be that the situation of Israel's teachers looks much worse than it actually is.

However, if the compensation measure across countries is nonetheless identical and comparable, then the graph indicates the possibility of a third explanation: too many teachers are sharing one budget pie that might be big, but is still not large enough to provide decent compensation for each teacher.

If it turns out that in order to pay each teacher more, there will be a need to cut the size of the workforce – that would be my guess – then this does not imply that we need to charge ahead full speed down the layoff path as the previous education minister, Limor Livnat, contended. Since roughly 4,000-6,000 teachers leave the system each year (the exact number depends on who you ask), then in 5 years time, natural evolution will lead to the cumulative exit of about 25,000 teachers. When the school day will be lengthened, the school week shortened, and additional school days will be added to the annual calendar, these major changes in work conditions will provide an impetus for many additional teachers to want to leave of their own volition, on condition that they receive sufficient compensation for doing so.

This doesn't mean that there won't be confrontations and struggles with the teachers regarding the size of the retirement packages, but it will be an argument at a completely different level than what took place here during the past two years. It is the only way to justify the requisite additional funding for successfully initiating a substantial reduction in the number of teachers.

When education minister Tamir demands additional budgets without specifying where she stands with regard to each of the three alternatives detailed above, the implication is that she has yet to internalize that the problem in Israel's education system is not a lack of funds but the inadequate utilization of them. This does not mean that no additional money will be required to enact reforms. Additional funds will definitely be needed.

But before asking for more money, the new education minister must first identify the actual reasons that led the system to produce pupils with such low levels of achievements, teachers with such low salaries, and all this with education budgets that did not fall below those of most western countries. She needs to provide a detailed and coherent explanation of the primary failures together with actual solutions for dealing with the root problems of the education system. Only then will it be possible to justify a temporary budgetary increase to finance educational reform in Israel.