The Ontario Teacher's Strike and E-Learning

The Fiscal Environment

It was obvious that the teacher's union position was never going to reconcile with the government's position. This is a fight that has been brewing for decades. The teacher's union, and public sector unions in general, didn't accept the long-held notion of modest salary and benefits in exchange for job security.

Well, now Ontario is in a fiscal mess. We have run budget deficits every year since 2002 and have had only 3 surplus years since 1990. The Ontario government held $95 billion of debt in 1990. Now we hold $325 billion. Will we hold $1.1 Trillion in 2050? Interest on debt accounts for 8% of total expense. Paying the annual interest bill is already the third largest budget expenditure. This is in a low interest rate environment. If you had a suspicion that you were getting $.92 of 'government' for every tax dollar sent to the Ontario government, you were right. Piling on debt year after year is unsustainable and something must change.

Spending on education never declines.[1]

	Spending per Fiscal Year in billions						
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Spending on K - 12 Education	$ 23.6	$ 24.6	$ 24.8	$ 27.6	$ 29.0	$ 30.8	$ 31.6

We hear terms like "Draconian cuts to education" by union leadership. Where are they? Given our debt situation, cuts from the second largest expenditure item on the budget are necessary.

Can we tax our way out of this? Let's ask current Toronto Maple Leaf Austin Matthews for help. His salary is around $16,000,000 per year. He must be able to help. Well, he is already paying $8,500,000 in income tax and he feels a little taxed out[2]. I don't blame him. He pays more income tax than he gets to keep. Quite frankly, we are all taxed out. We don't have a government revenue problem. We have a government spending problem.

The two largest expenditures in the Ontario budget are perennially spending on health and spending on K – 12 education.[3] If we are to address spending, we look at the largest expenditures first.

This is the context necessary to understand negotiations between the government and public sector unions. This article deals with spending on education.

Compensation Per Teacher & Number of Teachers Compensated

Both the Ford and Wynne government understood the need to address spending on education. The current government is addressing two areas: compensation per teacher and the number of teachers compensated.

Compensation per Teacher (We address salary and pension benefit only)

Salary

What are the teachers' unions asking for? The unions want a 2% salary increase. The government is mandating a 1% salary increase for all public sector employees, including teachers.

The unions want an increase of every "step" by 2%. The government wants to increase every step by an amount less than the rate of inflation. If the government prevails, teachers are losing purchasing power. Implicit in the governments' argument is that teachers are over-paid and annual compensation increases less than the rate of inflation will rectify the situation over time. The previous government negotiated wage increases to less than the rate of inflation in the 2014-2019 collective agreement[4]

The disagreement on compensation will be resolved only after we agree on a fair salary for teachers. What are teachers paid and is it fair? Let's look and we will focus on high school teacher's compensation only. We will focus on salary and the pension benefit and not other benefits in this article.

There are a few things to understand. One is steps on the grid and two is the negotiated increase of each step[5]. The most recent grid and three recent grids are shown below. "Step" refers to years of experience and "group" refers to the level of educational achievement of the teacher. The grid does not include principals, vice principals, and support staff.

Let's look at Group 3. A teacher starting their career has a starting salary of $54.375. In year two the salary increases to $58,029 assuming a 0% negotiated step increase. A Group 3 teacher will achieve their maximum salary of $94,183 after ten years of work assuming no step increase. A teacher with 11 years of experience or more would not get a raise if there is no negotiated step increase.

How does the grid work with negotiated step increases? A teacher who started on September 1, 2018 earned $53,837 in year one and would earn $58,029 in year two. They climbed a step and all the steps increased by 1%. That is a 7.8% raise. A teacher with at least 11 years of experience on September 1, 2018 would have pay increased from $93,250 to $94,183. Their salary would increase by the negotiated step increases thereafter. Note that 1% was the negotiated step increase between September 1, 2018 and February 1, 2019 and all 10 steps grew by 1%.

The government has mandated through legislation that the upper limit of the next increase to the grid is 1%.

Effective February 1, 2019				
Step	Group 1	Group 2	Group 3	Group 4
0	48040	50273	54375	58230
1	50578	52939	58029	61388
2	53519	56014	61890	65146
3	56460	59096	65742	68916
4	59809	62566	69810	73291
5	63152	66068	73868	77666
6	66499	69548	77931	82034
7	69857	73020	81993	86418
8	73205	76505	86052	90785
9	76547	79987	90117	95161
10	79896	83462	94183	99536

Effective September 1, 2018				
Step	Group 1	Group 2	Group 3	Group 4
0	47564	49775	53837	57653
1	50077	52415	57454	60780
2	52989	55459	61277	64501
3	55901	58511	65091	68234
4	59217	61947	69119	72565
5	62527	65414	73137	76897
6	65841	68859	77159	81222
7	69165	72297	81181	85562
8	72480	75748	85200	89886
9	75789	79195	89225	94219
10	79105	82636	93250	98550

Effective February 3, 2017				
Step	Group 1	Group 2	Group 3	Group 4
0	46397	48554	52516	56238
1	48848	51129	56044	59289
2	51689	54099	59773	62918
3	54530	57076	63495	66560
4	57765	60428	67424	70785
5	60993	63809	71343	75011
6	64226	67169	75266	79230
7	67468	70523	79189	83463
8	70701	73890	83109	87681
9	73930	77252	87036	91907
10	77165	80609	90963	96132

Effective September 1, 2014				
Step	Group 1	Group 2	Group 3	Group 4
0	45709	47834	51738	55404
1	48124	50371	55213	58410
2	50923	53297	58887	61985
3	53722	56230	62553	65573
4	56909	59532	66425	69736
5	60089	62863	70285	73899
6	63273	66173	74150	78055
7	66467	69477	78015	82226
8	69652	72794	81877	86381
9	72834	76107	85746	90545
10	76021	79414	89614	94707

Pension Benefit

A teacher who works for 30 years can expect a pension stream equal to 60% of the average best 5 years salary[6]. A teacher who works for 25 years can expect a pension stream of 50% of the average best 5 years salary.

Teachers contribute 10% of salary towards their pension. The taxpayer matches these contributions by at least 100%. In recent years the pension had a deficit and the taxpayer contributed 12%. A teacher who started at 25 years old can retire at 55 with a full pension stream starting at 60% of the average of the best 5 years salary. The pension stream is indexed to inflation measured by rate of increase of CPI.

A group 3 teacher with 30 years experience who retires with the best 5 years averaging $94,183 will receive $56,509 of pension in the first year of retirement.

What is the value of this? Assuming a retirement of 30 years, a 2% annual inflation rate, and a 5% discount rate, the pension stream has a value of $1.149 million (See the second link in the blog post). In other words, a non-pension recipient who wants the exact same income stream needs an RRSP balance of $1.149 million on retirement date. The RRSP holder extracts the same payment stream as the retired teacher and the balance must grow at 5%. The RRSP account exhausts in 30 years. This provides an approximate value of the pension stream on retirement date.

Teachers pay a lot from their paycheck into their pension plan, but with 100% matching the more they pay, the more non-salary, taxpayer money they receive injected into their pension plan. At 100% matching, teachers fund half their pension from their paycheque and the taxpayer funds the other half.

Some Thoughts:

- Substantial raises are front loaded, and teachers reach maximum salary quickly. It takes most in the private sector around 30 years to reach maximum salary. This is underappreciated. We all hit our maximum salary at some point. We would be better off if we hit it sooner rather than later.
- Salary must be adjusted for time off. All teachers, including a first-year teacher, receive 8 weeks off in the summer, 2 weeks at Christmas, and one week in March. An 11-week vacation package is around double what an employee in the private sector receives at year 30.
- A group 3 teacher with more than 11 years experience earns $94,183 for a 41-week work year. Annualizing the salary equates to a $110,263 for a 48-week work year.
- Using the local Catholic high school as an example, first class starts at 8:05am and the last class ends at 2:10pm. The mandatory minimum lunch break is 40 minutes[7]. If you add an hour of homework marking, you are up to about a 6.5-hour day.
- The trade-off used to be mediocre wages for superior job security.
- A high school teacher with 11 years or more experience is well into the top 10% of income earners in Ontario.
- The pension is a defined benefit plan. Retired teachers receive a monthly income stream regardless of investment performance. Defined contribution or group RRSPs that are common in the private sector shift the market risk to the employee. If investment performance is bad, the retiree receives a smaller income stream in retirement.
- Taxpayers take the investment risk of the teacher's pension and have contributed more than 10% when there have been deficits in the pension plan's funding. In 2018, teachers contributed 10% from salary and taxpayers contributed 12%. The taxpayer has funded more of the teacher's pension stream than what was funded from the teacher's salary. There are some interesting statistics that indicate pension deficits may occur more frequently[8].

Number of Teachers Compensated

Context

In the 2017/18 school year there were 2,020,301 students in Ontario and there were 125,979 full-time equivalent teachers[9]. This equates to 16 students per teacher.

Teachers work on average for 30 years. It is reasonable to assume that 1/30 or 4,160 teachers retire every year. If retiring teachers are not replaced the teacher workforce would be reduced by 33% in ten years. This is without any teacher being laid off. The point being that any oversupply can be rectified through attrition.

What is the cynical view of union leadership? They want to get re-elected, grow their membership base, grow union dues, and grow political power. What is the cynical view of elected public servants? They want to get re-elected. This leads to a potential unhealthy relationship between public sector unions and government. Government acquiesces to union demands and gains a significant voting bloc. Government negotiates with other peoples' money. The potential conflict for the government is that they are both stewards of tax dollars and they want to win re-election. The union endorses the party that succumbs to their demands. It is less painful to succumb to union demands with other peoples' money.

Public sector unions endorse political candidates. They haven't endorsed the PC party for years. The PC party owes them no favours and can be tough negotiators. They don't expect to win public sector union members' vote in upcoming elections.

The Conflict

The government wants to increase average class size in high school from 22 to 25 and they want at least 2 of the 31 courses students take in high school to be delivered electronically. The unions are fighting this hard. Why? They predict the future and they don't like what they see. They fear the affect of increased class size and e-learning on the membership base, union dues, and political power.

E-learning Will Become an Important Educational Delivery Mechanism

Canada has been delivering e-learning to remote communities successfully since the early 2000[10]s. By all accounts it has been deemed a success by all stakeholders.

An expansion of e-learning delivery can be envisioned. Most high schools deliver more than one version of the same course each semester. For example, two or more grade 12 biology courses delivered in the same semester. We will eventually move to deliver one course physically coupled with an electronically delivered version for all subjects. The decision to attend a physical class or e-learn will eventually be a voluntary decision between parent and child. We also imagine that students who choose to e-learn must maintain a certain grade. If they fail to meet the standard, they lose e-learning privileges.

The efficacy of e-learning is hard to ignore. "Google" the efficacy of e-learning. If face to face interaction is necessary, students can attend the physically delivered lecture.

E-learning will reduce the number of teachers needed and reduce the square feet of classroom needed. The savings will be enormous. Less of everything will be required. From buses, to cleaning supplies, to teachers, to schools, to pension administers. Many students will not physically attend school for most of a typical week.

Where Does This Leave Us

The government is in a good position to negotiation and they know it. They don't owe public sector unions any favours from election support. The fiscal situation is troublesome, and everyone knows it. Taxpayers has been generous to teachers. Given our fiscal environment, we must explore new methods of delivering quality education at a substantially lower cost. New technology changes the landscape and allows us to save a massive amount of money without sacrificing the quality of education. Change is coming, but don't expect the change to occur without a fight.

Appendix

Pension funding statistics and data are important to the taxpayer because it is the taxpayer who pays any deficits. Expected years on pension is 28% higher in 2018 than 1990. As we live longer, this number can be expected to grow. The below is from the Ontario Teachers Pension Plan Annual Report.

	2018	1990
Average retirement age	**59**	58
Average starting pension	**$47,300**	$29,000
Average contributory years at retirement	**26**	29
Expected years on pension	**32**	25
Number of pensioners aged 100 or more	**133**	13
Ratio of active teachers to pensioners	**1.3 to 1**	4 to 1
Average contribution rate	**11.0%**	8.0%

---

[1] 2019 Ontario Budget 2016 Ontario Budget
[2] EY Tax Calculator
[3] Ontario Budget 2019
[4] Ontario Secondary School Teachers' Federation Collective Agreement2014 to 2019 pg 42
[5] Ontario Secondary School Teachers' Federation Collective Agreement 2014 to 2019 pg 42.
[6] Ontario Teachers Pension Plan
[7] Ontario Secondary School Teachers' Federation Collective Agreement 2014 to 2019 Part B-25 L25.1
[8] Ontario Teachers Pension Plan Annual Report
[9] Ontario Ministry of Education
[10] Centre for Distance Learning & Innovation