

Citizen Control of the Citizen's Business

TORONTO'S CITIZENS CAN CONTROL TORONTO'S AFFAIRS ONLY THROUGH FREQUENT, PROMPT, ACCURATE AND PERTINENT INFORMATION WITH REGARD TO TORONTO'S BUSINESS.

ISSUED BY THE
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White Paper No. 11.

March 10, 1916

SCHOOL STORY No. 7

One way in which Toronto is preparing to grapple with After-the-War Problems.

If every citizen is to contribute his full share
to the life of his

City
Province
Nation

he must be not only good
but good for something.

*The Toronto Technical School is an outstanding
agency which is helping Toronto boys, girls, men
and women to be good for something.*

Like every other good school, a good technical
school costs good money.

Money properly spent on education is money saved.

What is the city investing annually in
Technical Education?

What returns does the city expect on
its investment?

WHAT IT IS COSTING

For the school year 1915-16, the Toronto Technical School will cost the taxpayers and parents of this city approximately a quarter of a million dollars.* Nearly seven thousand individuals will have come directly under the school's influence. On the basis of 27½ hours for a full week's work this is equivalent to a full time attendance of over 1,700 students.

WHAT IT IS DOING

- It is inculcating the dignity of labor;
- It is enabling boys and girls to discover their definite abilities so that they may be able to discover their real life work and avoid blind-alley occupations;
- It is "motivating" instruction by giving every student something to do which he recognizes, or can be made to recognize, as worth while, thus saving mental wear and tear on both pupil and teacher and vitalizing education;
- It is teaching straight thinking and definite action by requiring work that cannot be done at all without exact measurement and careful execution, thus enabling pupils to readily distinguish between the "real" and the "sham," between what is good and what only looks good;
- It is teaching the fundamentals underlying all productions, making possible apprentices of the highest possible intelligence, and later on adaptable and resourceful craftsmen and craftswomen;
- It is fitting thousands to "collect" the living that the world is said to "owe" them;
- It is helping put Toronto, the Province, and the Dominion in a position to take their places in the federation of efficient democracies which will prove their right to existence after the war, by the contributions they will make to the world's thought, work and life;
- It is helping Toronto, the Province, and the Dominion to substitute, as far as possible, for crude production refined production, for the raw material the finished product, for passable production the best possible craftsmanship, for parasitism on the old world vigorous self-respecting contribution to the whole world;
- It is helping the citizen, the city, the Province and the Dominion to stand on their own feet

Industrially,
Commercially,
Intellectually,
Morally,
Humanly.

* It is estimated that the amount of \$15,000 will be received from students' fees, government grants, etc. As pointed out in our previous white paper, this does not affect the cost of education, nor even, except for fees of non-resident pupils, the cost to citizens of Toronto, who pay their full share toward the Provincial and Dominion Governments.

Beginnings are always particularly expensive and full of difficulties.

The Toronto Technical School is no exception.

Here are some of its transitory difficulties:

The day classes have not yet grown to the building's full capacity. Except for instruction, the attendance could be doubled without appreciably increasing the amount of expenditure.

Not all the shops are yet ready for use. When all are ready more students can be accommodated, thus greatly cutting down the per capita costs.

Present war and industrial conditions militate against full attendance. When normal conditions return depleted part time, day and evening classes will again fill up.

In addition to these temporary difficulties it must be borne in mind that vocational education is always the most expensive because

Tremendously expensive equipment is required;

Shop and laboratory instruction demand small classes, where individual students may do practical work;

Two part time classes cost more than instruction for the same length of time in one regular class.

COSTS AND PER PUPIL COSTS

The Boston Industrial School for Boys costs \$192.18 for every boy in average membership, and \$207.30 for every boy in average attendance.* The Boston Mechanic Arts High School costs \$96.02 per student in average membership, and \$99.91 per student in average attendance. These figures do not include cost of administration, supervision, general charges, interest, depreciation, repairs or sinking fund charges. The Boston Schools, the former of which is comparatively small, taken together, correspond fairly well in attendance and purposes with the Toronto Technical School. Owing to the fact that the Toronto Technical School has not yet occupied its present building for one academic year, it is not possible to estimate at all accurately the average daily attendance. On the basis of probable average membership, reducing all registration to the full time standard, the per pupil cost of education in the Toronto Technical School will be for the academic year 1915-1916 \$150.68 (estimated), including insurance, estimated interest charges, repairs, administration and general charges excluded in the Boston costs. On the same basis as Boston the (estimated) per pupil costs in Toronto would be \$91.54. This constitutes a remarkable achievement, particularly in view of the facts that the school is in its first and therefore most expensive year, and that thousands of dollars properly chargeable to capital have in the interests of conservative management been paid out of revenue.

On the following pages appear estimates as to the cost of Technical School education in Toronto for 1915-16, classified according to object of expenditure and character of expenditure. It will be noted that the last column contains the cost of giving one pupil one hour instruction, in other words, the pupil-hour cost. The cost of giving one pupil one hour's instruction per week for forty weeks can be obtained by multiplying the figures in the last column by forty. Pupil-hour costs are the only entirely satisfactory figures for administrative or comparative purposes, as they are the only ones which make possible comparison of schools of different types. For comparison of costs of schools of same type, cost per pupil in average registration, which indicates what the cost would be under ideal conditions of attendance, or cost per pupil in average daily attendance, which represents the actual cost of instruction under actual conditions, are fairly satisfactory.

In facing the problem of technical education it is well to bear in mind that its welfare, which all patriotic citizens must desire, cannot best be promoted by underestimating its cost. Let us frankly recognize that it is very expensive but very worth while. Then let us see to it that its cost be the least possible consistent with full efficiency, and that the resulting service be the greatest possible for the expenditure made.

* Including administration, supervision and general charges but not including interest, depreciation, repairs or sinking fund charges, the corresponding figures are \$202.47 and \$218.41.

Technical School Costs Analyzed According to Objects of Expenditure

THINGS PURCHASED	Estimated for School Year 1915-1916 (1)	PER PUPIL COSTS		Cost of giving One pupil One Hour's Instruction.
		On Average Miscellaneous Registration	On Estimated Average Registration reduced to Full Time Basis.	
Personal Service	\$134,231	\$19.62	\$78.59	\$0.07
Administrative Salaries	4,910	.71	2.88	.....
Teachers' Salaries	110,586	16.16	64.74	.....
Engineers' Salaries	4,635	.68	2.72	.....
Caretakers' Salaries.....	8,975	1.32	5.25	.....
General	5,125	.75	3.00	.....
Services Other Than Personal	\$ 3,368	.49	1.97	.002
Electricity, Gas and Water.....	2,075	.30	1.22	.....
Telephone Service and Express	793	.12	.46	.....
Advertising.....	500	.07	.29	.....
Supplies and Equipment	\$ 27,220	3.98	15.94	.014
Office Supplies	2,128	.32	1.25	.....
For Board ⁽²⁾	1,147	.17	.68	.....
For School.....	14,225	2.08	8.33	.....
Educational.....	900	.13	.52	.....
Janitorial.....	6,500	.95	3.80	.....
Coal and Wood.....	2,320	.33	1.36	.....
General.....				
Fittings and Fixtures	\$ 2,000	.29	1.17	.001
Fixed Charges	\$ 90,548	13.23	53.01	.05
Insurance	637	.09	.37	.....
4½% on Capital Investment ⁽³⁾	89,911	13.14	52.64	.....
Totals	\$257,367⁽⁴⁾	\$37.61	\$150.68	\$0.137

(1) Based on actual expenditure for the first half of the year and estimated expenditure for the second half.
 (2) This covers the cost of printing for the Board of Education done by the Technical School and should be deducted from Technical School Costs.
 (3) A considerable part of this investment is chargeable to the large auditorium which is greatly in demand for general public uses and for the use of other activities of the Board of Education.
 (4) See footnote on page 2.

Technical School Costs Analyzed According to Character of Expenditure

CHARACTER OF EXPENDITURE	Estimated Expenditure (1) for School Year 1915-1916	PER PUPIL COSTS		Cost of giving One pupil One Hour's Instruction.
		On Estimated Average Registration	On Estimated Average Registration Reduced to Full Time Basis	
Administration ⁽²⁾	\$ 8,185	\$ 1.20	\$ 4.79	\$0.0043
Direct Operation	\$154,334	22.55	90.36	.08
Instruction ⁽³⁾	124,811	18.24	73.074	.....
Engineering Service.....	4,635	.68	2.713	.....
Janitorial Service.....	9,875	1.44	5.78	.....
Transportation and Communication	793	.115	.464	.....
Light, Heat and Water Service.....	8,575	1.25	5.02	.....
Miscellaneous.....	5,045	.82	3.31	.....
Upkeep	\$ 4,300	.63	2.52	.0023
Repairs.....	2,300	.34	1.35	.....
Replacements.....	.....	.....	.....	.....
Improvements.....	2,000	.29	1.17	.....
Fixed Charges	\$ 90,548	13.23	53.01	.05
Totals	\$257,367 ⁽³⁾	\$37.61	\$150.68	\$0.137

(1) See preceding page. (2) Part of the time of the principal, and possibly of other members of the staff, should properly be charged to administration. Owing to the lack of exact information to make a division possible, the salaries of all employees who do any teaching or educational supervision is included under "Instruction."

(3) See footnote on page 2.

CO-OPERATION IN TECHNICAL EDUCATION.

This city contains large numbers of well-ordered factories with an immense amount of the highest grade machinery. In Cincinnati and Fitchburg the schools, the manufacturers and labor have made co-operative arrangements by which some students spend week or fortnight about in the factory and the school getting regular academic instruction and technical theoretical instruction in the school and thoroughly supervised practical work for which students receive pay in the factory workshops. This system

Cuts down capital expenditure (machinery and shops being supplied by the manufacturer at no expense to the city;)

Enables the boys to learn their craft under actual workshop conditions;

Mobilizes all the city's productive resources.

We wish to raise the question, now that technical education in Toronto has a dignified effective home centre, whether future expansion should not largely be along co-operative lines.

Richmond, Virginia, decided on its technical education policy only after a complete survey of its industrial, commercial and educational resources. Should Toronto go ahead further without a thorough detailed inquiry along the same lines? Minnesota, Cincinnati, and Baltimore are following this method. Why not measure Toronto for its industrial suit of clothes before cutting out the suit?

What are our industrial resources?
What do they need for full development?
What are our commercial resources?
What do they need for full development?
What are our human resources?
What do they need for full development?

How can we best bring together our industrial, commercial and human resources so as to produce the maximum result?

Can we decide that in our armchairs,
or must we base our decisions
on the facts?

**What we need is educational as well as
industrial and commercial
engineering.**

**Canadian Co-operation not
Prussian Domination.**