

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
BUREAU OF MUNICIPAL RESEARCH

813-820 Traders Bank Building, Toronto
Telephone: Main 3620.

White Paper No. 16.

February 23, 1917

SCHOOL STORY No. 11.

**What happens to our boys and girls
is more important than
what happens to our dollars.**

If it were not for our boys and girls
our dollars would be
of little use or value.

The Board of Education, in its 1915 Report, accounts not only for the dollars contributed by taxpayers but for the boys and girls confided to its care by parents.

The information given on pages 33 and 34 of this report is invaluable, and without further analysis provides a measure of school efficiency probably not heretofore offered to any Canadian community in an annual report.

**Public Education
the most vital function of government,
and, therefore, the most worthy of
study by citizens.**

What schooling to give their children is one of the hardest problems which parents have to face. How parents can take an effective interest in their children's school progress, without hurting the children or interfering with school processes, is another difficult question which the formation of Home and School Clubs and similar agencies for the co-operation of parents, teachers, children and Boards of Education, is doing much to answer. The first test of real desire to help the schools to help the children is willingness to invest time and thought in understanding the needs and difficulties of both. Understanding of these is not simple and easy. No statement of these can be so clear as to make thought unnecessary. The following statement is no exception. We ask you to read it.

**How the slow progress of children through the
school course is measured in the mass.**

Three standards for measuring the progress of school children have been advanced in Toronto. The first (see page 40, 1913 Report of the Board of Education) regards the course of study as a six-and-a-half-year course. The table on page 33 of the 1915 Report shows that the Senior First, Junior Second and Senior Second are each completed in one-half a year by thousands of children. For these, and with changed conditions, perhaps for many others, the course is but six and one-half school years long. The second standard, commonly used in many places in Ontario, regards the public school course as an eight year course. By the third standard, the normal time for completing the course is seven and one-quarter school years. This is the average of eight years and six and one-half years. If the Senior First, Junior Second and Senior Second should normally be done in three-quarters of a year each—which coincides with the opinion of several authorities—and if a year be assigned to each of the other grades, the course would be seven and a quarter years long. It is noteworthy that this corresponds exactly with the average time of completing the course as shown on page 35 of the report of the Board of Education for 1915.

Assuming this third standard to be the one most in keeping with actual conditions—being an extreme standard in neither direction—the Bureau of Municipal Research has analyzed the tables of the report so as to classify the children who were members of the public schools in June, 1915. Owing to the absence of individual records for each child going back eight years, the educational authorities determined for each child how long, in years and half years, he had been in his grade of June, 1915. In reading the Board's report it must be borne in mind that some of the grades are one school year long and some less. The Senior First, Junior Second and Senior Second seem by general consent and by the evidence of the figures to be the short grades.

Among the large cities on this continent Toronto stands well with regard to retardation. Her aim is not to equal others, but to live up to her highest possibilities.

TABLE I.
Further Analysis of the Promoted and Non-Promoted Pupils Classified in
the Tables on Pages 33 and 34 of the Board of Education Report.

PUPILS WHO	Junior 1st	Senior 1st	Junior 2nd	Senior 2nd	Junior 3rd	Senior 3rd	Junior 4th	Senior 4th	TOTAL
Made their grades in rapid time. (Rapid)	879	1,022	1,041	900	1,318	862	519	222	6,763
Made their grades in normal time. (Normal)	3,186	2,192	2,116	2,011	2,516	2,645	2,081	1,511	18,258
Made their grades in slow time. (Slow)	1,103	1,555	1,549	1,442	632	402	191	348	7,222
Failed to make their grades in normal time. (Slow)	2,297	1,420	1,332	1,040	1,040	691	581	486	8,887
Were not promoted but were not in grades nor- mal time for promotion. (Rate of progress unknown)	3,165	1,052	917	617	1,600	672	376	125	8,524
Total.....	10,630	7,241	6,955	6,010	7,106	5,272	3,748	2,692	49,654

32,243 promoted.

4

TABLE II.
Relative losses in pupil years made by 16,109 slow pupils
classified in horizontal columns 3 and 4 in the preceding table
(in doing the work of their grades as of June, 1915)

Children who lost in the work of their grades	Junior 1st	Senior 1st	Junior 2nd	Senior 2nd	Junior 3rd	Senior 3rd	Junior 4th	Senior 4th	TOTAL
½ School Year	(Pupil Years) 312	(Pupil Years) 1,071	(Pupil Years) 1,005½	(Pupil Years) 869½	(Pupil Years) 200	(Pupil Years) 57½	(Pupil Years) 18½	(Pupil Years) 37	(Pupil Years) 3,570½
1 " "	2,208	631	659	569	1,058	917	707	718	7,467
1½ " "	453	94½	67½	81	186	51	9	18	960
2 " "	408	32	70	38	176	54	44	60	882
2½ " "	72½	5	7½	.....	2½	.....	.....	.....	87½
3 " "	63	.....	3	6	3	.....	.....	.....	75
3½ " "	16½	.....	.....	.....	.....	.....	.....	.....	16½
4 " "	16	.....	.....	.....	.....	.....	.....	.....	16
4½ " " .....	.....	.....	.....	.....	.....	.....	.....	.....	0
5 " "	15	.....	.....	.....	.....	.....	.....	.....	15
Total.....	3,564	1,833½	1,812½	1,563½	1,625½	1,079½	778½	833	13,089½

TABLE III.

Net relative losses in pupil years

reached by subtracting from total relative losses of slow pupils the total relative gains by rapid progress pupils. The first set of figures shows the net loss, the second the net loss after the second year, and the third to a 74% year course. (See Table III, referred to above). This analysis covers the work of the grades the children were in, June 1915. Less than half a school year was considered to be a quarter year.

Operating account for the term ending June, 1915, showing a net loss in pupil years of 10,084 $\frac{3}{4}$ on an expenditure of 42,629 pupil years, made by 49,654 children in doing the work of the grades they were then in.

	Junior 1st	Senior 1st	Junior 2nd	Senior 2nd	Junior 3rd	Senior 3rd	Junior 4th	Senior 4th	TOTALS
(Pupil Years)	(Pupil Years)	(Pupil Years)	(Pupil Years)	(Pupil Years)	(Pupil Years)	(Pupil Years)	(Pupil Years)	(Pupil Years)	(Pupil Years)
Total number of pupil-years invested by children in doing the work of their grades,	9,596 $\frac{3}{4}$	5,503 $\frac{3}{4}$	5,388 $\frac{1}{2}$	4,780 $\frac{1}{2}$	6,145	4,869 $\frac{3}{4}$	3,487 $\frac{1}{2}$	2,857 $\frac{3}{4}$	42,629
Total number of pupil-years in this investment lost, according to Standard I. (NET, balancing gains against losses)	3,107 $\frac{1}{2}$	3,054 $\frac{1}{2}$	2,984 $\frac{1}{2}$	2,574 $\frac{1}{2}$	947	641 $\frac{1}{2}$	514 $\frac{1}{2}$	720 $\frac{3}{4}$	14,544
Total number of pupil-years in this investment lost, according to Standard II. (NET, balancing gains against losses)	3,107 $\frac{1}{2}$	123 $\frac{1}{2}$ (gained)	83 $\frac{1}{2}$ (gained)	98 $\frac{1}{2}$ (gained)	947	641 $\frac{1}{2}$	514 $\frac{1}{2}$	720 $\frac{3}{4}$	5,625 $\frac{1}{2}$
Total number of pupil-years in this investment lost, as measured by Standard I and II. (Net).	3,107 $\frac{1}{2}$	1,465 $\frac{1}{2}$	1,450 $\frac{1}{2}$	1,237 $\frac{3}{4}$	947	641 $\frac{1}{2}$	514 $\frac{1}{2}$	720 $\frac{3}{4}$	10,084 $\frac{3}{4}$
Percentage of NET retardation in doing the work of the grades the children were in, in June 1915.	32.3%	26.6%	26.9%	25.8%	15.4%	13.1%	14.7%	25.2%	23.6%

Mass measurements a gauge of the general degree of progress from year to year in combatting retardation.

Perhaps we should repeat here what we said in our school story preceding this, that measurements of retardation in the mass deal only with relative retardation and are intended not to apply to particular cases but to set up a standard by which the progress of a school system as a whole may be measured. As making the necessary analysis twice a year necessitates the close consideration of each individual pupil by teachers and principals the individual child is bound to be benefitted thereby, the value of this by-product cannot be overestimated.

In considering Table II, it should, therefore, be borne in mind that the actual preventible loss of school time is less than here stated, as many pupils were naturally so slow or their health so poor as to make normal progress impossible. If such pupils were allowed to take their own gait, there was no real loss to them. On the other hand, experience has shown that great results can be obtained by attention to individual needs. Such an analysis as that of Table II, made every year, or twice a year, provides an index as to the success of methods used to combat retardation.

The net loss through retardation an excellent index of degree of adjustment of school conditions to child needs.

Table III, offsets the relative losses by relative gains and shows the net loss. Granting the necessity for class instruction under existing conditions, the net loss, therefore, is a fair approximation to the actual loss as school conditions, the classification of pupils, the grading of the course of study and the methods of teaching should, of course, be so adjusted as to meet the median needs of the class and **equalize the relative losses and gains**. The net relative losses, therefore, approach actual losses and indicate maladjustment in the school machinery somewhere. Experience has shown that improvements in classification, adaptation of courses of study to local needs, and other arrangements can bring about a balance of losses and gains. However, a loss should never be accepted simply because there is an equivalent gain elsewhere. Whether there should be such acceptance in any particular case depends upon individual inquiry.

Money Cost of Retardation.

In this study, in estimating the money loss, one cannot use the average daily attendance as the pupils studied did not in all cases attend every day in the school year. The average monthly registered number, which approaches very nearly to the total number of children in the Board's analysis on pages 33 and 34, seems to be

the fairest standard for the purpose of this analysis. The cost per child in average monthly registration, including debt charges, was about \$44.20. This is, therefore, the cost of giving one pupil, whose attendance is average, one year's schooling. (The actual cost of giving a full year's schooling is about \$52.00.) The time invested by the pupils studied, in terms of dollars and cents, was worth \$1,884,201.80. The value of the pupils' investment which was lost, after offsetting losses by gains, was \$445,745.95. How much of this was remediable loss we cannot know, but that it can be cut down all experience teaches.

How can parents help in diminishing preventable retardation?

The 1913 Report of the Board gave as one of the chief causes of the slow progress of children, the indifference of parents. If you are a parent, do you know your child's teacher and principal? Are you a member of the Home and School Club in your district? Do you know what measures your school is taking to insure individual consideration for the individual child?

The school is simply an extension of the home—many homes co-operating to do together what they cannot do separately. **Some parents still have their schools in their homes. All others can consider themselves at home in their schools.** Every child gets a large part of his schooling at home. **Is your school home co-operating with your home school?** If not, are you responsible for limiting the efficiency of the schools?

A little personal interest is often a better investment than a large tax payment. Big expenditures do not necessarily guarantee the best schools.

Advance Steps

Retardation can be successfully grappled with only by attention to individual cases, but this work could be greatly facilitated by the following administrative measures:

- I. **The division of the course of study into seven parts equal as to time necessary for completion by the most prevalent type of pupil.** (A course of study divided into unequal grades of uncertain duration is exactly analagous to a foot rule with inches of unequal and uncertain length. All sorts of failure can hide behind indefinite standards.)
- II. **The division of each grade into two sub-grades each of a half year's duration and with semi-annual promotions in each grade, so that when a child fails of promotion he will be compelled to do over again only the work of half a year instead of that of a whole year.** (This will not take the place of individual attention, but it will greatly minimize the loss from repeating grades, particularly where there are large classes. Arrangements can easily be made, if thought desirable, to have practically all children remain at least a year with the same teacher.)