

give them a compass that will enable them to sail successfully the uncharted seas of existence? Are we helping them, not only to make a livelihood, but to make a life as well? To acquire commercial success, and also to be good citizens? With what inner capacity for happiness do we provide them, so that they may be alone—and yet not lonely; that they may suffer,—and still smile: that they may be “baffled, only to fight the better”: and that they may still have, as Barrie has said, “the roses in the December of their lives.”

To accomplish this is no easy task. No institutions have come under such a scathing fire of criticism as colleges and universities. Some of this criticism may be—and probably is—justified, but much of it is grossly unfair. The public too often forget that after all the University is their own institution and that their co-operation is necessary to its success. McGill has not escaped some of this criticism; but I think the criticism is many times offset by the substantial progress made.

First, let me say that much criticism arises from a very positive lack of appreciation of the run-down condition of the University ten years ago. For the four years previous to that date Canada was at war—and McGill too was at war. Professors and students deserted her halls to fight a battle on foreign fields for the preservation and perpetuation of those ideals and standards more readily understood and appreciated by them because of their training here at McGill. Alas, some professors and students did not return. But in the sacrifices they made they added greatly to McGill's imperishable fame. Those left behind gave their best to keep the flag flying at home, but staffs were depleted, libraries were overcrowded, laboratory facilities were not kept up to date, and McGill was sadly ill-prepared and ill-equipped to do justice to the greatly increased number of students who sought admission in the years which followed the war.

A campaign for funds took place, with a most generous response, but let us face the truth; only about half of what was really necessary was raised. Some thought that McGill's needs were satisfied for years to come, but it soon became apparent such was not the case. The building programme planned as necessary had to be very definitely curtailed. The Pathological Building and the Biological Laboratories had to be gone on with, because their erection had been very definitely promised to the Rockefeller Foundation. The Library was extended. And here, I admit, we made a mistake. I was told that the addition would provide all necessary accommodation for fifteen or twenty years. It was full in five. Then the rush of students to Arts and Commerce so taxed the accommodation in the Old Building that additional space had to be provided. Furthermore, the Old Building was unsanitary, most inconvenient, so criminally dangerous as a fire trap that a single inspection by a committee of the Board of Governors condemned it, and it was

rebuilt. The cost of the buildings and extension enumerated, with the necessary endowment for maintenance, used up half the fund subscribed in 1920.

If the other buildings planned in 1920 were deemed necessary then, they are much more necessary now; and the lack of them in the intervening years has crippled our usefulness and made it increasingly hard for us to retain a position of leadership. Let us give but one example. I have heard our Department of Applied Science compared with the Massachusetts Institute of Technology in terms scathingly critical of our School. I have heard it said that not only were we lagging behind, but that we now occupied a “distinctly inferior position.”

Now I do not object to criticism, nor does the Engineering School; but such criticism and such comparison is unfair and unjust.

Let me briefly outline the departments in each institution, with the number of teachers.

	Massachusetts Institute of Technology	McGill
Aeronautical engineering.....	17	0
Chemical Engineering (as distinct from Chemistry).....	54	1
Civil and Sanitary Engineering and Survey- ing.....	20	9
Electrical Engineering.....	55	6
Fuel and Gas Engineering.....	5	1
Mechanical Engineering.....	62	5
Mining and Metallurgy.....	13	11
TOTAL		
Professorial.....	110	24
Junior.....	114	11
Research.....	51	5*
(* of whom 4 are in Mining and Metallurgy)		
Students, 1920.....	3,075	646
“ 1926.....	2,260	329

Comparison between these institutions leads nowhere and is largely futile. Let me call your attention to the fact that in Mechanical Engineering alone the Massachusetts Institute has 27 teachers of professorial rank and 28 juniors and 17 special lecturers, or far more than our entire engineering staff. Their investments in buildings and equipment, and their endowment devoted to engineering and allied branches are equal to the entire investments of McGill University. They surpass us in their post-graduate work, because they have many, many scholarships available: we have only a few. But they are not a single whit better in preparing undergraduates in those departments where we both operate, nor do their graduates hold higher or more responsible positions than ours, nor is the average salary earned by their graduates higher than that earned by ours.

Formerly, McGill's School of Engineering drew many students from every province in Canada. It still does; but we must not forget that in the last fifteen years British Columbia, Alberta and Saskatchewan have founded engineering schools of their own and that