

According to your instructions we have made tests of the acoustics of the Assembly Room in the Montreal High School.

We have measured the period of reverberation of sound of different frequencies in this room. No perceptible difference was found in the period of reverberation when measured at different points in the room.

These tests were made with the room empty. From the results obtained we are able to calculate with a satisfactory degree of accuracy what the period of reverberation will be with the room filled or partly filled with an audience. The results obtained are given in the following table:-

<u>Frequency</u>	<u>Period of Reverberation of Assembly Hall.</u>		
	<u>512</u>	<u>1034</u>	<u>2048</u>
Room Empty - Period actually measured.	2.60 Secs.	2.50 Secs.	1.70 Secs.
Room 1/3 Full - (400 people), Period calculated.	2.10 "	2.00 "	1.45 "
Room 2/3 Full - (800 people), Period calculated.	1.77 "	1.64 "	1.27 "
Room Full - (1200 people), Period calculated.	1.52 "	1.40 "	1.13 "

Discussion of Results:

The volume of the Assembly Room is approximately 250,000 cubic feet. For a room of this size, the period of reverberation usually regarded as best is 1.6 seconds.