

CLASSROOM ACOUSTICS OBSERVATION¹

Date _____ Surveyor _____

School _____ Room _____ Teacher _____

A classroom observation is a preparatory step for making classroom acoustics measurements. The observation provides information about acoustic parameters of the classroom as well as the style of instruction, seating arrangement and the status of communication access. If indicators are present, the situation should be referred to the educational audiologist for further assessment.

Background Noise

While people are not present in the classroom, listen for the following conditions; a “yes” is an indicator of potentially excessive levels of noise.

Classroom Features	Yes	No
Heating and ventilation system is audible		
Mechanical equipment must be turned off during important lessons		
Noise from playground is audible		
Noise from automobile traffic is audible		
Noise from air traffic is audible		
With heating and ventilation system turned off, sounds from other classrooms, learning spaces or hallway are audible		

Reverberation

Reverberation is sound reflections from the surfaces of a room. Reverberation Time is determined by the volume of the room and the absorptive characteristics of the materials making up the classroom walls, floors, and ceilings. Check the classroom for the following surfaces: a “yes” is an indicator of potentially high reverberation times.

Classroom Features	Yes	No
A hard surface, flat ceiling without acoustic ceiling tiles		
Ceiling height is over 11 feet		
Acoustic ceiling tiles have been painted		
Walls are constructed of sound reflective materials (e.g., plasterboard, concrete, wood paneling)		
Floors are constructed of sound reflective materials (e.g., concrete, tile, wood)		

Classroom Information

Current Technology in the Classroom (if used)

Personal Remote Microphone System

Number of students _____ Model _____

Classroom Audio Distribution System (CADS)

Type _____

Teacher to Listener Distance: Nearest _____ Ft

Farthest _____ Ft

Classroom Style: Traditional Open Portable/Relocatable

Primary Instruction Style: Lecture Large Group Small Group Individual Other _____

Seating Arrangement: Clusters Rows U-shape or Circle Other _____

¹ C.D.Johnson 2023. Adapted from C. D. Johnson, D. Ostergren, and J. Smaldino (2010) from Acoustic measurements in classrooms by J. Smaldino, C. Crandell, & B. Kreisman, 2005. In *Sound Field Amplification*, Crandell, Smaldino, & Flexer (Eds.) p. 131. Thomson Delmar Learning.