ACOUSTICS2008/2937 Soundfield amplification is a poor substitute for good classroom acoustics

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Soundfield (amplification) systems are widely and often aggressively marketed for small classrooms. In June 2006, the Acoustical Society of America (ASA) issued a public position statement on the use of sound amplification in typical small classrooms http://asa.aip.org/amplification.pdf . This paper attempts to explain why the ASA found that soundfield systems are poor substitutes for good acoustics. Good acoustics for learning requires unoccupied classroom noise levels of 35 dBA or less and mid frequency reverberation times of 0.6 second or less. At the same time, it is recognized that centralized amplifiers and sound distribution systems can provide valuable educational benefits in small classrooms with good acoustics. Such systems are useful for multimedia presentations and voice reinforcement. The authors urge that this message be brought to the attention of educators and educational facility decision makers.